

APPENDIX 2

BASIN PLAN

SURFACE WATER AND GROUNDWATER QUALITY OBJECTIVES

Bioaccumulation

Many pollutants can bioaccumulate in fish and other aquatic organisms at levels which are harmful for both the organisms as well as organisms that prey upon these species (including humans).

Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.

Biochemical Oxygen Demand (BOD₅)

The 5-day BOD test indirectly measures the amount of readily degradable organic material in water by measuring the residual dissolved oxygen after a period of incubation (usually 5 days at 20 °C), and is primarily used as an indicator of the efficiency of wastewater treatment processes.

Waters shall be free of substances that result in increases in the BOD which adversely affect beneficial uses.

Biostimulatory Substances

Biostimulatory substances include excess nutrients (nitrogen, phosphorus) and other compounds that stimulate aquatic growth. In addition to being aesthetical unpleasant (causing taste, odor, or color problems), this excessive growth can also cause other water quality problems.

Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

Chemical Constituents

Chemical constituents in excessive amounts in drinking water are harmful to human health. Maximum levels of chemical constituents in drinking waters are listed in the California Code of Regulations and the relevant limits are described below.

Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use.

Water designated for use as Domestic or Municipal Supply (MUN) shall not contain concentrations of chemical constituents in excess of the limits specified in the following provisions of Title 22 of the California Code of Regulations which are incorporated by reference into this plan: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431 (Fluoride), and Table 64444-A of Section 64444 (Organic Chemicals). This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Tables 3-5, 3-6, and 3-7.)

Table 3-5. The Maximum Contaminant Levels: Inorganic Chemicals (for MUN beneficial use) specified in Table 64431-A of Section 64431 of Title 22 of the California Code of Regulations as of 9-8-94.

Constituent	Maximum Contaminant Level mg/L
Aluminum	1
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL*
Barium	1
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.2
Mercury	0.002
Nickel	0.1
Nitrate (as NO ₃)	45
Nitrate + Nitrite (sum as nitrogen)	10
Nitrite (as nitrogen)	1
Selenium	0.05
Thallium	0.002

* MFL = million fibers per liter; MCL for fibers exceeding 10 µm in length

Table 3-7. The Maximum Contaminant Levels: Organic Chemicals (for MUN beneficial use) specified in Table 64444-A of Section 64444 of Title 22 of the California Code of Regulations as of 9-8-94.

Constituent	Maximum Contaminant Level mg/L
A. Volatile Organic Chemicals (VOCs)	
Benzene	0.001
Carbon Tetrachloride	0.0005
1,2-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane	0.0005
1,1-Dichloroethylene	0.006
cis-1,2-Dichloroethylene	0.006
trans-1,2-Dichloroethylene	0.01
Dichloromethane	0.005
1,2-Dichloropropane	0.005
1,3-Dichloropropene	0.0005
Ethylbenzene	0.7
Monochlorobenzene	0.07
Styrene	0.1
1,1,2,2-Tetrachlorethane	0.001
Tetrachloroethylene	0.005
Toluene	0.15
1,2,4-Trichlorobenzene	0.07
1,1,1-Trichloroethane	0.200
1,1,2-Trichloroethane	0.005
Trichloroethylene	0.005
Trichlorofluoromethane	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2
Vinyl Chloride	0.0005
Xylenes (single isomer or sum of isomers)	1.750
B. Non-Volatile Synthetic Organic Chemicals (SOCs)	
Alachlor	0.002
Atrazine	0.003
Bentazon	0.018

Constituent	Maximum Contaminant Level mg/L
Benzo(a)pyrene	0.0002
Carbofuran	0.018
Chlordane	0.0001
2,4-D	0.07
Dalapon	0.2
1,2-Dibromo-3-chloropropane	0.0002
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.004
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide	0.00005
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor Epoxide	0.00001
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.04
Molinate	0.02
Oxamyl	0.2
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated Biphenyls	0.0005
Simazine	0.004
Thiobencarb	0.07
Toxaphene	0.003
2,3,7,8-TCDD (Dioxin)	3X10 ⁻⁸
2,4,5-TP (Silvex)	0.05

Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters^a.

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH ^b	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron ^c (mg/L)	Nitrogen ^d (mg/L)	SAR ^e (mg/L)
Miscellaneous Ventura Coastal Streams	no waterbody specific objectives ^f					
Ventura River Watershed:						
Above Camino Cielo Road	700	300	50	1.0	5	5
Between Camino Cielo Road and Casitas Vista Road	800	300	60	1.0	5	5
Between Casitas Vista Road and confluence with Weldon Canyon	1000	300	60	1.0	5	5
Between confluence with Weldon Canyon and Main Street	1500	500	300	1.5	10	5
Between Main St. and Ventura River Estuary	no waterbody specific objectives ^f					
Santa Clara River Watershed:						
Above Lang gaging station	500	100	50	0.5	5	5
Between Lang gaging station and Bouquet Canyon Road Bridge	800	150	100	1.0	5	5
Between Bouquet Canyon Road Bridge and West Pier Highway 99	1000	300	100	1.5	10	5
Between West Pier Highway 99 and Blue Cut gaging station	1000	400	100	1.5	5	10
Between Blue Cut gaging station and A Street, Fillmore	1300	600	100	1.5	5	5
Between A Street, Fillmore and Freeman Diversion "Dam" near Saticoy	1300	650	80	1.5	5	5
Between Freeman Diversion "Dam" near Saticoy and Highway 101 Bridge	1200	600	150	1.5	-	-
Between Highway 101 Bridge and Santa Clara River Estuary	no waterbody specific objectives ^f					
Santa Paula Creek above Santa Paula Water Works Diversion Dam	600	250	45	1.0	5	5
Sespe Creek above gaging station, 500' downstream from Little Sespe Creek	800	320	60	1.5	5	5
Piru Creek above gaging station below Santa Felicia Dam	800	400	60	1.0	5	5
Calleguas Creek Watershed:						
Above Potrero Road	850	250	150	1.0	10	f
Below Potrero Road	no waterbody specific objectives ^f					

Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters^a (cont.)

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH ^b	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron ^c (mg/L)	Nitrogen ^d (mg/L)	SAR ^e (mg/L)
Miscellaneous Los Angeles County Coastal Streams	no waterbody specific objectives ^f					
Malibu Creek Watershed	2000	500	500	2.0	10	-
Ballona Creek Watershed	no waterbody specific objectives ^f					
Dominguez Channel Watershed	no waterbody specific objectives ^f					
Los Angeles River Watershed:						
Above Figueroa Street	950	300	150	g	8	g
Between Figueroa Street and Los Angeles River Estuary (Willow Street). Includes Rio Hondo below Santa Ana Freeway	1500	350	150	g	8	g
Rio Hondo above Santa Ana Freeway ^h	750	300	150	g	8	g
Santa Anita Creek above Santa Anita spreading grounds	250	30	10	g	f	g
Eaton Canyon Creek above Eaton Dam	250	30	10	g	f	g
Arroyo Seco above spreading grounds	300	40	15	g	f	g
Big Tujunga Creek above Hansen Dam	350	50	20	g	f	g
Pacoima Wash above Pacoima spreading grounds	250	30	10	g	f	g
San Gabriel River Watershed:						
Above Morris Dam	250	30	10	0.6	2	2
Between Morris Dam and Ramona Blvd.	450	100	100	0.5	8	g
Between Ramona Blvd. and Firestone Blvd.	750	300	150	1.0	8	g
Between Firestone Blvd. and San Gabriel River Estuary (downstream from Willow Street) including Coyote Creek	no waterbody specific objectives ^f					
All other minor San Gabriel Mountain streams tributary to San Gabriel Valley ⁱ	300	40	15	g	f	g
Island Watercourses:						
Anacapa Island	no waterbody specific objectives ^f					
San Nicolas Island	no waterbody specific objectives ^f					
Santa Barbara island	no waterbody specific objectives ^f					
Santa Catalina Island	no waterbody specific objectives ^f					
San Clemente Island	no waterbody specific objectives ^f					

Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters^a (cont.)

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH ^b	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron ^c (mg/L)	Nitrogen ^d (mg/L)	SAR ^e (mg/L)
Other Watercourses:						
San Antonio Creek ^f	225	25	6	--	--	--
Chino Creek ^f	--	--	--	--	--	--

- As part of the State's continuing planning process, data will continue to be collected to support the development of numerical water quality objectives for waterbodies and constituents where sufficient information is presently unavailable. Any new recommendations for water quality objectives will be brought before the Regional Board in the future.
- All references to watersheds, streams and reaches include all tributaries. Water quality objectives are applied to all waters tributary to those specifically listed in the table. See Figures 2-1 to 2-10 for locations.
- Where naturally occurring boron results in concentrations higher than the stated objective, a site-specific objective may be determined on a case-by-case basis.
- Nitrate-nitrogen plus nitrite-nitrogen (NO₃-N + NO₂-N). The lack of adequate nitrogen data for all streams precluded the establishment of numerical objectives for all streams.
- Sodium adsorption ratio (SAR) predicts the degree to which irrigation water tends to enter into cation-exchange reactions in soil.

$$SAR = Na+ / ((Ca++ + Mg++) / 2)^{1/2}$$

- Site-specific objectives have not been determined for these reaches at this time. These areas are often impaired (by high levels of minerals) and there is not sufficient historic data to designate objectives based on natural background conditions. The following table illustrates the mineral or nutrient quality necessary to protect different categories of beneficial uses and will be used as a guideline for establishing effluent limits in these cases. Protection of the most sensitive beneficial use(s) would be the determining criteria for the selection of effluent limits.

Recommended objective (mg/L)	Beneficial Use Categories				
	MUN (Drinking Water Standards) ¹	PROC	AGR	AQ LIFE ⁶ (Frshwtr)	GWR
TDS	500 (USEPA secondary MCL)	50-1500 ^{2,7,9}	450-2000 ^{2,3,6}		Limits based on appropriate groundwater basin objectives and/or beneficial uses
Chloride	250 (USEPA secondary MCL)	20-1000 ^{2,9}	100-355 ^{2,3,8}	230 (4 day ave. continuous conc) ⁴	
Sulfate	400-500 (USEPA proposed MCL)	20-300 ^{2,9}	350-600 ^{2,8}		
Boron			0.5-4.0 ^{2,5,8}		
Nitrogen	10 (USEPA MCL)				

References: 1) USEPA CFR § 141 et seq., 2) McKee and Wolf, 1963, 3) Ayers and Westcot, 1985, 4) USEPA, 1988, 5) Water Pollution Control Federation, 1989, 6) USEPA, 1973, 7) USEPA 1980, 8) Ayers, 1977.

* Aquatic life includes a variety of Beneficial Uses including WARM, COLD, SPWN, MIGR and RARE.

- Agricultural supply is not a beneficial use of the surface water in the specified reach.
- Rio Hondo spreading grounds are located above the Santa Ana Freeway
- The stated objectives apply to all other surface streams originating within the San Gabriel Mountains and extend from their headwaters to the canyon mouth.
- These watercourses are primarily located in the Santa Ana Region. The water quality objectives for these streams have been established by Santa Ana Region. Dashed lines indicate that numerical objectives have not been established, however, narrative objectives shall apply. Refer to the Santa Ana Region Basin Plan for more details.

Pesticides

Pesticides are used ubiquitously for a variety of purposes; however, their release into the environment presents a hazard to aquatic organisms and plants not targeted for their use. The extent of risk to aquatic life depends on many factors including the physical and chemical properties of the pesticide. Those of greatest concern are those that persist for long periods and accumulate in aquatic life and sediments.

No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the limiting concentrations specified in Table 64444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-7.)

pH

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. While the pH of "pure" water at 25 °C is 7.0, the pH of natural waters is usually slightly basic due to the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life.

The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge.

The pH of bays or estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge.

Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are a highly toxic and persistent group of organic chemicals that have been historically released into the environment. Many historic discharges still exist as sources in the environment.

The purposeful discharge of PCBs (the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260) to waters of the Region, or at locations where the waste can subsequently reach waters of the Region, is prohibited.

Pass-through or uncontrollable discharges to waters of the Region, or at locations where the waste can subsequently reach water of the Region, are limited to 70 pg/L (30 day average) for protection of human health and 14 ng/L and 30 ng/L (daily average) to protect aquatic life in inland fresh waters and estuarine waters respectively.

Radioactive Substances

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life, wildlife or humans.

Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of Section 64443 (Radioactivity) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-9.)

Table 3-9. The Maximum Contaminant Levels: Radioactivity (for MUN beneficial use) specified in Table 4 of Section 64443 of Title 22 of the California Code of Regulations as of 12-22-88.

MCL Radioactivity	Maximum Contaminant Level pCi/L
Combined Radium-226 and Radium-228	5
Gross Alpha particle activity (including Radium-226 but excluding Radon and Uranium)	15
Tritium	20,000
Strontium-90	8
Gross Beta particle activity	50
Uranium	20

(pCi/L = picocuries = curies $\times 10^{-12}$)

Solid, Suspended, or Settleable Materials

Surface waters carry various amounts of suspended and settleable materials from both natural and human sources. Suspended sediments limit the passage of sunlight into waters, which in turn inhibits the growth of aquatic plants. Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish.

Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.

Taste and Odor

Undesirable tastes and odors in water are an aesthetic nuisance, can impact recreational and other uses, and can indicate the presence of other pollutants.

Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible aquatic resources, cause nuisance, or adversely affect beneficial uses.

Temperature

Discharges of wastewaters can cause unnatural and/or rapid changes in the temperature of receiving waters which can adversely affect aquatic life.

The natural receiving water temperature of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. Alterations that are allowed must meet the requirements below.

For waters designated WARM, water temperature shall not be altered by more than 5 °F above the natural temperature. At no time shall these WARM-designated waters be raised above 80 °F as a result of waste discharges.

For waters designated COLD, water temperature shall not be altered by more than 5 °F above the natural temperature.

Temperature objectives for enclosed bays and estuaries are specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" (Thermal Plan), including any revisions thereto. See Chapter 5 for a description of the Thermal Plan.

Toxicity

Toxicity is the adverse response of organisms to chemical or physical agents. When the adverse response is mortality, the result is termed acute toxicity. When the adverse response is not mortality but instead reduced growth in larval organisms or reduced reproduction in adult organisms (or other appropriate measurements), a critical life stage effect (chronic toxicity) has occurred. The use of aquatic bioassays (toxicity tests) is widely accepted as a valid approach to evaluating toxicity of waste and receiving waters.

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.

Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters^a.

DWR Basin No. ^b	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
	Pitas Point Area ^c	None specified			
4-1	Ojai Valley				
	Upper Ojai Valley				
	West of Sulfur Mountain Road	1,000	300	200	1.0
4-2	Central area	700	50	100	1.0
	Sisar area	700	250	100	0.5
	Lower Ojai Valley				0.5
4-3	West of San Antonio—Senior Canyon Creeks	1,000	300	200	0.5
	East of San Antonio—Senior Canyon Creeks	700	200	50	0.5
4-3	Ventura River Valley				
	Upper Ventura	800	300	100	0.5
	San Antonio Creek area	1,000	300	100	1.0
4-4	Lower Ventura	1,500	500	300	1.5
	Ventura Central ^d				
4-4	Santa Clara—Piru Creek area				
	Upper area (above Lake Piru)	1,100	400	200	2.0
	Lower area east of Piru Creek	2,500	1,200	200	1.5
	Lower area west of Piru Creek	1,200	600	100	1.5
	Santa Clara—Sespe Creek area				
	Topa Topa (upper Sespe) area	900	350	30	2.0
	Fillmore area				
	Pole Creek Fan area	2,000	800	100	1.0
	South side of Santa Clara River	1,500	800	100	1.1
	Remaining Fillmore area	1,000	400	50	0.7
	Santa Clara—Santa Paula area				
	East of Peck Road	1,200	600	100	1.0
	West of Peck Road	2,000	800	110	1.0
	Oxnard Plain				
	Oxnard Forebay	1,200	600	150	1.0
4-6	Confined aquifers	1,200	600	150	1.0
	Unconfined and perched aquifers	3,000	1,000	500	—
4-6	Pleasant Valley				
	Confined aquifers	700	300	150	1.0
	Unconfined and perched aquifers	—	—	—	—
4-7	Arroyo Santa Rosa	900	300	150	1.0
4-8	Las Posas Valley				
	South Las Posas area				
	NW of Grimes Cyn Rd & LA Ave & Somis Rd	700	300	100	0.5
	E of Grimes Cyn Rd and Hitch Blvd	2,500	1,200	400	3.0
	S of LA Ave between Somis Rd & Hitch Blvd	1,500	700	250	1.0
	Grimes Canyon Rd & Broadway area	250	30	30	0.2
4-5	North Las Posas area	500	250	150	1.0
	Upper Santa Clara				
	Acton Valley	550	150	100	1.0
	Sierra Pelona Valley (Agua Dulce)	600	100	100	0.5
	Upper Mint Canyon	700	150	100	0.5
4-5	Upper Bouquet Canyon	400	50	30	0.5
	Green Valley	400	50	25	—
	Lake Elizabeth—Lake Hughes area	500	100	50	0.5

Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters^a (cont.)

DWR Basin No. ^b	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
4-4.07	Eastern Santa Clara				
	Santa Clara-Mint Canyon	800	150	150	1.0
	South Fork	700	200	100	0.5
	Placerita Canyon	700	150	100	0.5
	Santa Clara-Bouquet & San Francisquito Canyons	700	250	100	1.0
	Castaic Valley	1,000	350	150	1.0
	Saugus Aquifer	-	-	-	-
4-9	Simi Valley				
	Simi Valley Basin				
	Confined aquifers	1,200	600	150	1.0
	Unconfined aquifers	-	-	-	-
	Gillibrand Basin	900	350	50	1.0
4-10	Conejo Valley	800	250	150	1.0
4-11	Los Angeles Coastal Plain				
	Central Basin	700	250	150	1.0
	West Coast Basin	800	250	250	1.5
	Hollywood Basin	750	100	100	1.0
	Santa Monica Basin	1,000	250	200	0.5
4-12	San Fernando Valley				
	Sylmar Basin	600	150	100	0.5
	Verdugo Basin	600	150	100	0.5
	San Fernando Basin				
	West of Highway 405	800	300	100	1.5
	East of Highway 405 (overall)	700	300	100	1.5
	Sunland-Tujunga area *	400	50	50	0.5
	Foothill area *	400	100	50	1.0
	Area encompassing RT-Tujunga-Erwin-	600	250	100	1.5
	N. Hollywood-Whithall-LA/Verdugo-Crystal Springs-				
	Headworks-Glendale/Burbank Well Fields				
	Narrows area (below confluence of Verdugo	900	300	150	1.5
	Wash with the LA River)				
	Eagle Rock Basin	800	150	100	0.5
4-13	San Gabriel Valley				
	Raymond Basin				
	Monk Hill sub-basin	450	100	100	0.5
	Santa Anita area	450	100	100	0.5
	Pasadena area	450	100	100	0.5
	Main San Gabriel Basin				
	Western area †	450	100	100	0.5
	Eastern area †	600	100	100	0.5
	Puente Basin	1,000	300	150	1.0
4-14 8-2 ^c	Upper Santa Ana Valley				
	Live Oak area	450	150	100	0.5
	Claremont Heights area	450	100	50	-
	Pomona area	300	100	50	0.5
	Chino area	450	20	15	-
	Spadra area	550	200	120	1.0
4-15	Tierra Rejada	700	250	100	0.5
4-16	Hidden Valley	1,000	250	250	1.0
4-17	Lockwood Valley	1,000	300	20	2.0
4-18	Hungry Valley and Peace Valley	500	150	50	1.0

Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters^a (cont.)

DWR Basin No. ^b	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
4-19	Thousand Oaks area	1,400	700	150	1.0
4-20	Russell Valley	1,500	500	250	1.0
	Russell Valley	2,000	500	500	2.0
	Triunfo Canyon area	2,000	500	500	2.0
	Lindero Canyon area	2,000	500	500	2.0
	Las Virgenes Canyon area	2,000	500	500	2.0
4-21	Conejo-Tierra Rejada Volcanic area ^b	—	—	—	—
4-22	Santa Monica Mountains—southern slopes ⁱ	—	—	—	—
	Camarillo area	1,000	250	250	1.0
	Point Dume area	1,000	250	250	1.0
	Malibu Valley	2,000	500	500	2.0
	Topanga Canyon area	2,000	500	500	2.0
	San Pedro Channel Islands ^j	—	—	—	—
	Anacapa Island	—	—	—	—
	San Nicolas Island	1,100	150	350	—
	Santa Catalina Island	1,000	100	250	1.0
	San Clemente Island	—	—	—	—
	Santa Barbara Island	—	—	—	—

- a. Objectives for ground waters outside of the major basins listed on this table and outlined in Figure 1-9 have not been specifically listed. However, ground waters outside of the major basins are, in many cases, significant sources of water. Furthermore, ground waters outside of the major basins are either potential or existing sources of water for downgradient basins and, as such, objectives in the downgradient basins shall apply to these areas.
- b. Basins are numbered according to Bulletin 118-80 (Department of Water Resources, 1980).
- c. Ground waters in the Pitas Point area (between the lower Ventura River and Rincon Point) are not considered to comprise a major basin, and accordingly have not been designated a basin number by the California Department of Water Resources (DWR) or outlined on Figure 1-9.
- d. The Santa Clara River Valley (4-4), Pleasant Valley (4-6), Arroyo Santa Rosa Valley (4-7) and Las Posas Valley (4-8) Ground Water Basins have been combined and designated as the Ventura Central Basin (DWR, 1980).
- e. The category for the Foothill Wells area in previous Basin Plan incorrectly groups ground water in the Foothill area with ground water in the Sunland-Tujunga area. Accordingly, the new categories, Foothill area and Sunland-Tujunga area, replace the old Foothill Wells area.
- f. All of the ground water in the Main San Gabriel Basin is covered by the objectives listed under Main San Gabriel Basin – Eastern area and Western area. Walnut Creek, Big Dalton Wash, and Little Dalton Wash separate the Eastern area from the Western area (see dashed line on Figure 2-17). Any ground water upgradient of these areas is subject to downgradient beneficial uses and objectives, as explained in Footnote a.
- g. The border between Regions 4 and 8 crosses the Upper Santa Ana Valley Ground Water Basin.
- h. Ground water in the Conejo-Tierra Rejada Volcanic Area occurs primarily in fractured volcanic rocks in the western Santa Monica Mountains and Conejo Mountain areas. These areas have not been delineated on Figure 1-9.
- i. With the exception of ground water in Malibu Valley (DWR Basin No. 4-22), ground waters along the southern slopes of the Santa Monica Mountains are not considered to comprise a major basin and accordingly have not been designated a basin number by the California Department of Water Resources (DWR) or outlined on Figure 1-9.
- j. DWR has not designated basins for ground waters on the San Pedro Channel Islands.

Statewide Objectives for Ocean Waters

The State Board's *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) and the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) and any revision thereto, shall also apply to all ocean waters of the Region. These plans are described in Chapter 5, Plans and Policies. Copies of these plans can be obtained at the Office of Legislative and Public Affairs (OLPA) in Sacramento or at the Regional Board office.

Site Specific Objectives

While many pollutants are regulated under federal, state or regionally applied water quality standards, the Regional Board supports the idea of developing site-specific objectives (SSOs) in appropriate circumstances. Site-specific, or reach-specific, objectives are already in place for some parameters (i.e., mineral quality). These were established to protect a specific beneficial use or were based on antidegradation policies. The development of site-specific objectives requires complex and resource intensive studies; resources will limit the number of studies that will be performed in any given year. In addition, a Use Attainability Analysis (UAA) study will be necessary if the attainment of designated aquatic life or recreational beneficial uses is in question. UAAs include waterbody surveys and assessments which define existing uses, determine appropriateness of the existing and designated uses, and project potential uses by examining the waterbody's physical, chemical, and biological characteristics. Under certain conditions, a designated use may be changed if attaining that use would result in substantial and widespread economic and social impacts. Uses that have been attained can not be removed under a UAA analysis. If a UAA study is necessary, that study must be completed before a SSO can be determined. Early planning and coordination with Regional Board staff will be critical to the development of a successful plan for developing SSOs.

Site-specific objectives must be based on sound scientific data in order to assure protection of beneficial uses. There may be several acceptable methods for developing site-specific objectives. A

detailed workplan will be developed with Regional Board staff and other agencies (if appropriate) based on the specific pollutant and site involved. State Board staff and the USEPA will participate in the development of the studies so that there is agreement on the process from the beginning of the study.

Although each study will be unique, there are several elements that should be addressed in order to justify the need for a site-specific objective. These may include, but are not limited to:

- Demonstration that the site in question has different beneficial uses (e.g., more or less sensitive species) as demonstrated in a UAA or that the site has physical or chemical characteristics that may alter the biological availability or toxicity of the chemical.
- Provide a thorough review of current technology and technology-based limits which can be achieved at the facility(ies) on the study reach.
- Provide a thorough review of historical limits and compliance with these limits at all facilities in the study reach.
- Conduct a detailed economic analysis of compliance with existing, proposed objectives.
- Conduct an analysis of compliance and consistency with all federal, state, and regional plans and policies.

Once it is agreed that a site-specific objective is needed, the studies are performed, and an objective is developed, the following criteria must be addressed in the proposal for the new objective.

- Assurance that aquatic life and terrestrial predators are not currently threatened or impaired from bioaccumulation of the specific pollutant and that the biota will not be threatened or impaired by the proposed site-specific level of this pollutant. Safe tissue concentrations will be determined from the literature and from consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

For terrestrial predators, the presence, absence, or threat of harmful bioaccumulated pollutants will be determined through consultation with the

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
January 27, 1997
Resolution No. 97-02

***Amendment to the Water Quality Control Plan to incorporate a
Policy for Addressing Levels of Chloride in Discharges of Wastewaters***

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region finds that:

1. In 1975, the Regional Board established water quality objectives for chloride in most of the Region's waterbodies based on background concentrations of chloride, in accordance with the *Statement of Policy with Respect to Maintaining High Quality Water in California* (State Board Resolution No. 68-16, commonly known as the *State Antidegradation Policy*) and the federal *Antidegradation Policy* (as set forth in 40 CFR 131.12). Water quality objectives are the basis for limits in Waste Discharge Requirements that are prescribed by the Regional Board.
2. When water quality objectives for chloride were set in accordance with the State *Antidegradation Policy* and the federal *Antidegradation Policy*, the Regional Board assumed that chloride concentrations in imported waters would remain relatively low. Since 1975, however, chloride concentrations in supply waters imported into the Region have been increasing. During the late 1980s, drought in watersheds that are sources of imported supply waters made it difficult for many dischargers in the Los Angeles Region to comply with water quality limits for chloride.
3. In addition to relatively high chloride levels in supply waters, chloride levels in wastewaters in the Region can be affected by salt loading that occurs during beneficial use and treatment of supply waters and wastewaters. In some areas of the Region, a significant amount of loading may occur from the use of water softeners.
4. In 1990, the Regional Board adopted Resolution No. 90-04: *Effects of Drought-Induced Water Supply Changes and Water Conservation Measures on Compliance with Waste Discharge Requirements within the Los Angeles Region*. This resolution, commonly referred to as the *Drought Policy*, was intended to provide short-term and temporary relief to dischargers who were unable to comply with limits for chloride due to the effects of drought on chloride levels in supply waters imported into the Region.

For those dischargers who applied for relief under the Drought Policy, the Regional Board temporarily reset limits on concentrations of chloride at the lesser of: (i) 250 mg/L, or (ii) the chloride concentrations in supply waters plus 85 mg/L. An important condition of this relief was that dischargers demonstrate that high chloride concentrations in their discharges of wastewaters are due to increased salinity levels in supply waters imported into their service areas. Several dischargers provided data that confirm that supply waters imported into the Region are the cause of exceedances of chloride limits in discharges of wastewaters. However, many other dischargers have not yet adequately assessed the source(s) of relatively high levels of chloride in wastewaters and the extent to which exceedances are due to factors such as chloride in supply waters and/or significant chloride loading during beneficial use and treatment of supply waters and wastewaters.

November 15, 1996
Revised January 10, 1997
Revised January 14, 1997
Revised January 27, 1997

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5. The drought ended before the *Drought Policy* was due to expire in 1993. However, because water supply reservoirs still had high chloride concentrations in 1993 and because water suppliers estimated that it would take 12 to 18 months for complete replenishment of imported waters in reservoirs, the Regional Board renewed the *Drought Policy* in June 1993 and again in February 1995. The *Drought Policy* currently is due to expire on the earlier of February 27, 1997 or at that point in time when it has been determined that chloride levels in water supplies imported into the Region have returned to pre-drought conditions.
6. Chloride levels in supply waters imported into the Region and in reservoirs are no longer impacted by drought. However, chloride levels in supply waters imported into the Region are generally higher than they were before drought conditions in the late 1980. The higher levels of chloride in imported waters appear to be the result of intensifying demands for and utilization of water resources in watersheds that are the sources of supply waters. In addition, future droughts may affect levels of chloride in supply waters imported into the Region.
7. The Regional Board recognizes the shortage of water in the Region and the need to conserve supplies of fresh water for protection of beneficial uses. Accordingly, the Regional Board supports water reclamation, as described in State Board Resolution No 77-01: *Policy with Respect to Water Reclamation in California*. However, achievements in water conservation and reclamation can increase levels of chloride and other ionic constituents in reclaimed waters and wastewaters that are ultimately discharged to waterbodies in the Region.
8. In order to develop a long-term solution to the chloride compliance problems stemming from elevated levels of chloride in supply waters imported into the Region, the Regional Board has been working with a group of technical advisors, formerly known as the Chloride Subcommittee of the Surface Water Technical Review Committee. This group of technical advisors represents a variety of interests, including: water supply, reclamation, and wastewater management; environmental protection; and water softener industry interests. The group concurs with:
 - (a) an approach to permanently reset water quality objectives for chloride in certain surface waters, using levels of chloride in water supply plus a chloride loading factor.
 - (b) a need to assess long-term loading trends for chloride and other saline constituents.

Furthermore, due to concerns expressed about the potential for future adverse impacts to agricultural resources in Ventura County, the Regional Board proposes to work with a local group of agencies, municipalities, representatives of the agricultural community, and other interested parties in order to clarify chloride objectives needed to protect waters used for irrigation in the Santa Clara River and Calleguas Creek watersheds. In addition, this local group concurs with the need to undertake assessments of significant sources of chloride loading and—contingent upon results—identify methods that could control chloride loading and the costs and effectiveness of the various loading control methods.

9. The Secretary of Resources has certified the basin planning process exempt from certain requirements under the California Environmental Quality Act (CEQA), including preparation an initial study, a negative declaration and environmental impact report (Title 14, California Code of Regulations, Section 15251). As per this certification, an amendment to the *Basin Plan* is considered 'functionally equivalent' to an initial study, negative declaration, and environmental impact report.

Any regulatory program of the Regional Board certified as functionally equivalent, however, must satisfy the documentation requirements of Title 23, California Code of Regulations, Section 377(a), which requires an environmental checklist with a description of the proposed activity, and a determination with respect to significant environmental impacts. On November 15, 1996, the Regional Board distributed information regarding a proposed amendment to the *Basin Plan* to incorporate a *Policy for Addressing Levels of Chloride in Discharges of Wastewaters (Chloride Policy)*. This information included an environmental checklist, a description of the proposed amendment to the *Basin Plan*, and a determination that the proposed amendment could not have a significant effect on the environment.

10. The public has had reasonable opportunity to participate in review of the amendment to the *Basin Plan*. Efforts to solicit public review and comment include: public notification, more than 45 days preceding Board action; public workshops, held on December 2, 1996, December 3, 1996, and January 6, 1997; responses from the Regional Board to oral and written comments received from the public, and a public hearing held on January 27, 1997.
11. In amending the *Basin Plan*, the Regional Board considered factors set forth in section 13241 of the Porter-Cologne Water Quality Control Act (California Water Code, Division 1, Chapter 2, Article 3, et seq., plus others).
12. The amendment is consistent with the State *Antidegradation Policy* (State Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal *Antidegradation Policy* (40 CFR 131.12).
13. Revision of water quality objectives for chloride is subject to approval by the State Water Resources Control Board, the State Office of Administrative Law, and the US Environmental Protection Agency.

THEREFORE, BE IT RESOLVED THAT:

1. Water quality objectives for chloride for certain surface waters will be revised as specified below.

Waterbody	New Objective
Los Angeles River—between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only)	190 mg/L
Los Angeles River—between Figueroa Street and estuary (including Rio Hondo below Santa Ana Freeway only)	190 mg/L
Rio Hondo—between Whittier Narrows Flood Control Basin and Santa Ana Fwy	180 mg/L
San Gabriel River—between Valley Blvd. and Firestone Blvd. (including Whittier Narrows Flood Control Basin, and San Jose Creek downstream of 71 Fwy only)	180 mg/L

These new objectives are set at the lower of (i) levels needed to protect beneficial uses, or (ii) chloride levels in supply waters imported into the Region plus a chloride loading factor of 85 mg/L. The levels at which the new water quality objectives have been set are expected to accommodate fluctuations in chloride concentrations that may be due to future drought. Although the new water quality objectives do not match background levels of chloride, they nevertheless are expected to be fully protective of drinking water and freshwater aquatic life.

2. Due to concerns expressed about the potential for future adverse impacts to agricultural resources in Ventura County, water quality objectives for chloride in the Santa Clara River and Calleguas Creek watersheds will not be revised at this time. To address compliance problems with chloride limits based on existing water quality objectives, the Regional Board hereby grants variances (interim relief) to existing dischargers identified on Attachment A. The Executive Officer is directed to notify these dischargers that they are subject to surface water interim limits specified below.

Waterbody Segments for which Existing Dischargers Are Subject to Interim Chloride Limits	Interim Chloride Limit
Santa Clara River—between Bouquet Canyon Road Bridge and West Pier Highway 99	190 mg/L
Santa Clara River—between West Pier Highway 99 and Blue Cut gaging station	190 mg/L
Santa Clara River—between Blue Cut gaging station and A Street (Fillmore)	190 mg/L
Arroyo Simi and tributaries—upstream Madera Road	160 mg/L
Arroyo Simi—downstream Madera Road, Arroyo Las Posas, and tributaries	190 mg/L
Calleguas Creek and tributaries—between Potrero Road and Arroyo Las Posas (including Conejo Creek, Arroyo Conejo, and Arroyo Santa Rosa)	190 mg/L

The variance period for interim relief will extend for three years following final approval of the amendment. During this period, the Regional Board expects that the local group of agencies, municipalities, representatives of the agricultural community, and other interested parties which have commented upon this policy will work together to: (i) clarify water quality objectives needed to protect waters used for irrigation in the Santa Clara River and Calleguas Creek

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watersheds, (ii) assess significant sources of chloride loading, and (iii) contingent upon results of the chloride loading assessment, identify cost-effective ways that could protect beneficial uses of waters in the Santa Clara and Calleguas Creek watersheds. Should these issues not be resolved within the three-year variance period, the Regional Board intends to renew the variance.

At the end of the variance period, the Regional Board may reconsider revisions to water quality objectives for chloride in the Santa Clara River and Calleguas Creek watersheds. Future revisions of water quality objectives will consider chloride levels in supply waters (including fluctuations that may be due to future drought conditions), reasonable loading factors during beneficial use and treatment of supply waters and wastewaters, methods that could control chloride loading, and the associated costs and effectiveness of the various loading control methods.

3. To address the need to continue and, as appropriate, improve tracking and assessment of salinity loading throughout the Region, publicly-owned treatment works (POTWs) shall be required, as part of their NPDES permits, to monitor and assess salinity concentrations derived from: (i) source waters, (ii) loading that occurs during beneficial use of supply waters, and (iii) loading that occurs during treatment and disinfection of supply waters and wastewaters. Furthermore, those POTWs not already monitoring and assessing chloride loading from industrial sources shall expand their pre-treatment programs to include such assessments.

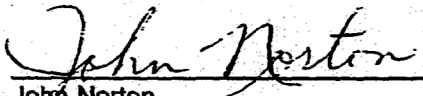
Monitoring data and assessments shall be reported by the POTWs to the Regional Board on an annual basis; the content and format of these reports shall be subject to approval by the Executive Officer of the Regional Board.

4. To address water quality problems from water softening processes throughout the Region, the Regional Board recommends that water suppliers, POTWs, and representatives of the water softener industry undertake educational campaigns, targeting residential, commercial, and industrial water consumers, on issues relating to water hardness, water quality problems associated with water softeners, and types of water softeners (encouraging the use of those types of softeners that pose less of a threat to water quality).
5. To address chloride loading that occurs during treatment and disinfection of supply waters and wastewaters, the Regional Board encourages shifts to less chlorine-intensive processes to achieve treatment and disinfection of supply waters and wastewaters, to the extent that such shifts are cost-effective and consistent with water quality and reclamation objectives.
6. Contingent upon the success of the salinity loading measures set forth in paragraphs (2) through (5) immediately above, the Regional Board may consider other salinity control measures at a later date. Such measures may include—but are not limited to—salt loading fees, bans or restrictions on inefficient water and/or "self-regenerating" types of softeners, regulatory controls of agricultural discharges, and expansion of POTW pretreatment programs to include salinity loading controls from commercial discharges.
7. Water quality objectives for chloride will not be changed for the headwaters of the Region's major stream systems. Furthermore, due to concerns over degradation of ground waters stored in the Region's basins, water quality objectives for chloride in ground waters will not be changed. In accordance with the State Antidegradation Policy, water quality objectives currently in effect will continue to protect the naturally-high quality of such surface and ground waters.

8. Resolution No. 90-04: *Effects of Drought-Induced Water Supply Changes and Water Conservation Measures on Compliance with Waste Discharge Requirements within the Los Angeles Region (Drought Policy)*, which was intended to provide short-term and temporary relief to dischargers who were unable to comply with limits for chloride due to the effects of drought on chloride levels in supply waters, is hereby rescinded with the adoption of this resolution.

While this resolution and amendment to the *Basin Plan* are under review by the State Water Resources Control Board, Office of Administrative Law, and the US Environmental Protection Agency, the Regional Board will evaluate compliance consistent with provisions set forth in this resolution.

I, John Norton, Acting Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 27, 1997.



John Norton
Acting Executive Officer

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***Amendment to the Water Quality Control Plan to incorporate a
Policy for Addressing Levels of Chloride in Discharges of Wastewaters***

Attachment A

**Publicly-owned Treatment Plants Subject to a Variance from
Chloride Limits Based on Existing Water Quality Objectives**

<u>Publicly-owned Treatment Plant</u>	<u>Operator</u>
Saugus Water Reclamation Plant 26200 Springbrook Road, Saugus	County Sanitation Districts of Los Angeles County
Valencia Water Reclamation Plant 28185 The Old Road, Valencia	County Sanitation Districts of Los Angeles County
Santa Paula Wastewater Reclamation Facility 905 Corporate Street, Santa Paula	City of Santa Paula & Ventura Regional Sanitation District
City of Simi Valley Water Quality Control Facility 600 West Los Angeles Avenue, Simi Valley	City of Simi Valley
Moorpark Wastewater Treatment Plant 9550 Los Angeles Avenue, Moorpark	Ventura County Waterworks, District No. 1
Camrosa Wastewater Treatment Plant Lewis Road & Potrero Road, Camarillo	Ventura County Regional Sanitation District & Camrosa County Water District
Hill Canyon Wastewater Treatment Plant 9600 Santa Rosa Road, Camarillo	City of Thousand Oaks
Olsen Road Water Reclamation Plant 2025 Olsen Road, Thousand Oaks	City of Thousand Oaks
Camarillo Sanitary District Water Reclamation Plant 150 East Howard Road, Camarillo	Camarillo Sanitary District

Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters* (cont.)

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH ^a	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron ^c (mg/L)	Nitrogen ^d (mg/L)	SAR ^e (mg/L)
Miscellaneous Los Angeles County Coastal Streams	no waterbody specific objectives ^f					
Malibu Creek Watershed	2000	500	500	2.0	10	-
Ballona Creek Watershed	no waterbody specific objectives ^f					
Dominguez Channel Watershed	no waterbody specific objectives ^f					
Los Angeles River Watershed:						
Above Figueroa Street	950	300	150 170	g	8	g
Between Figueroa Street and Los Angeles River Estuary (Willow Street). Includes Rio Hondo below Santa Ana Freeway	1500	350	150 190	g	8	g
Rio Hondo above Santa Ana Freeway ^h	750	300	150 180	g	8	g
Santa Anita Creek above Santa Anita spreading grounds	250	30	10	g	f	g
Eaton Canyon Creek above Eaton Dam	250	30	10	g	f	g
Arroyo Seco above spreading grounds	300	40	15	g	f	g
Big Tujunga Creek above Hansen Dam	350	50	20	g	f	g
Pacoima Wash above Pacoima spreading grounds	250	30	10	g	f	g
San Gabriel River Watershed:						
Above Morris Dam	250	30	10	0.6	2	2
Between Morris Dam and Ramona Blvd.	450	100	100	0.5	8	g
Between Ramona Blvd. and Firestone Blvd.	750	300	150 200	1.0	8	g
Between Firestone Blvd. and San Gabriel River Estuary (downstream from Willow Street) including Coyote Creek	no waterbody specific objectives ^f					
All other minor San Gabriel Mountain streams tributary to San Gabriel Valley ⁱ	300	40	15	g	f	g
Island Watercourses:						
Anacapa Island	no waterbody specific objectives ^f					
San Nicolas Island	no waterbody specific objectives ^f					
Santa Barbara Island	no waterbody specific objectives ^f					
Santa Catalina Island	no waterbody specific objectives ^f					
San Clemente Island	no waterbody specific objectives ^f					

Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters* (cont.)

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH ^a	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron ^c (mg/L)	Nitrogen ^d (mg/L)	SAR ^e (mg/L)
Other Watercourses:						
San Antonio Creek ^f	225	25	6	—	—	—
Chino Creek ^f	—	—	—	—	—	—

- As part of the State's continuing planning process, data will continue to be collected to support the development of numerical water quality objectives for waterbodies and constituents where sufficient information is presently unavailable. Any new recommendations for water quality objectives will be brought before the Regional Board in the future.
- All references to watersheds, streams and reaches include all tributaries. Water quality objectives are applied to all waters tributary to those specifically listed in the table. See Figures 2-1 to 2-10 for locations.
- Where naturally occurring boron results in concentrations higher than the stated objective, a site-specific objective may be determined on a case-by-case basis.
- Nitrate-nitrogen plus nitrite-nitrogen (NO₃-N + NO₂-N). The lack of adequate nitrogen data for all streams precluded the establishment of numerical objectives for all streams.
- Sodium adsorption ratio (SAR) predicts the degree to which irrigation water tends to enter into cation-exchange reactions in soil.
$$SAR = Na+ / ((Ca++ + Mg++)/2)^{1/2}$$
- Site-specific objectives have not been determined for these reaches at this time. These areas are often impaired (by high levels of minerals) and there is not sufficient historic data to designate objectives based on natural background conditions. The following table illustrates the mineral or nutrient quality necessary to protect different categories of beneficial uses and will be used as a guideline for establishing effluent limits in these cases. Protection of the most sensitive beneficial use(s) would be the determining criteria for the selection of effluent limits.

Recommended objective (mg/L)	Beneficial Use Categories				
	MUN (Drinking Water Standards) ¹	PROC	AGR	AQ LIFE*(Frshwtr)	GWR
TDS	500 (USEPA secondary MCL)	50-1500 ^{2,3}	450-2000 ^{2,3,6}		Limits based on appropriate groundwater basin objectives and/or beneficial uses
Chloride	250 (USEPA secondary MCL)	20-1000 ^{2,3}	100-355 ^{2,3,8}	230 (4 day ave. continuous conc) ⁴	
Sulfate	400-500 (USEPA proposed MCL)	20-300 ^{2,3}	350-600 ^{2,8}		
Boron			0.5-4.0 ^{2,8,8}		
Nitrogen	10 (USEPA MCL)				

References: 1) USEPA CFR § 141 et seq., 2) McKee and Wolf, 1963, 3) Ayers and Westcott, 1985, 4) USEPA, 1988, 5) Water Pollution Control Federation, 1989, 6) USEPA, 1973, 7) USEPA 1980, 8) Ayers, 1977.

* Aquatic life includes a variety of Beneficial Uses including WARM, COLD, SPWN, MIGR and RARE.

- Agricultural supply is not a beneficial use of the surface water in the specified reach.
- Rio Hondo spreading grounds are located above the Santa Ana Freeway
- The stated objectives apply to all other surface streams originating within the San Gabriel Mountains and extend from their headwaters to the canyon mouth.
- These watercourses are primarily located in the Santa Ana Region. The water quality objectives for these streams have been established by Santa Ana Region. Dashed lines indicate that numerical objectives have not been established, however, narrative objectives shall apply. Refer to the Santa Ana Region Basin Plan for more details.

**State of California
California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. 01-013
September 19, 2001**

**Amendment to the Water Quality Control Plan for the Los Angeles Region
to Incorporate a Total Maximum Daily Load for Trash in the Los Angeles River
Watershed**

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles
Region, finds that:**

1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality objectives which are sufficient to protect beneficial uses for each water body found within its region.
2. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the USEPA to complete Total Maximum Daily Loads (TMDLs) for all impaired waters within 13 years. A schedule was established in the consent decree for the completion of the first 29 TMDLs within 7 years. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
3. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)). The regulations in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.
4. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). This Water Quality Control Plan for the Los Angeles Region (Basin Plan), and applicable statewide plans, serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
5. The Los Angeles River is located in Los Angeles County, California. The Los Angeles River flows 51 miles from the western end of the San Fernando Valley to the Queensway Bay and Pacific Ocean at Long Beach. Also part of the watershed are a number of lakes including Peck Lake, Echo Lake, and Lincoln Lake.

6. On January 25, 2001, the Regional Board adopted a Basin Plan Amendment (Resolution 01-006) incorporating the Los Angeles River Trash TMDL into the Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties. Notice of the hearing was not published by the Regional Board in a newspaper of general circulation.
7. Staff have proposed changes to the January 25, 2001 trash TMDL to provide clarifying language and greater flexibility in the TMDL implementation.
8. On September 19, 2001, prior to the Board's action on this resolution, a public hearing was conducted. Notice of the hearing was published in accordance with the requirements of Water Code section 13244. The first notice was published in the Los Angeles Times, on June 19, 20, and 21, 2001, for a September 13, hearing. This hearing was rescheduled for September 19, 2000 and notice of this change was published in the Los Angeles Times on September 6, 2001. The entire administrative record, including transcripts from the January 25, 2001, public hearing have been entered into the record considered for this resolution.
9. The Regional Board has reconsidered its action of January 25, 2001. This resolution supercedes Resolution 01-006.
10. The public has had reasonable opportunity to participate in review of the amendment to the Basin Plan. Efforts to solicit public review and comment include release of a preliminary draft Trash TMDL on March 17, 2000, a public hearing on January 25, 2001, and a public hearing on September 19, 2001, seven public workshops, meetings with every stakeholder who requested such (ten meetings), and responses from the Regional Board staff to oral and written comments received from the public.
11. In amending the Basin Plan, the Regional Board considered the factors set forth in sections 13240 and 13241 of the Water Code.
12. The amendment is consistent with the State Anti-degradation Policy (State Board Resolution No. 69-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Anti-degradation Policy (40 CFR 131.12).
13. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code section 21000 et seq.).
14. Revision of water quality objectives for trash is subject to approval by the State Water Resources Control Board, the State Office of Administrative Law, and the US Environmental Protection Agency.

THEREFORE, be it resolved that pursuant to sections 13240 and 13241 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. Amend Chapter 3 and Chapter 7 of the Los Angeles Region Water Quality Control Plan to incorporate the elements of the Los Angeles River Trash TMDL as described in Attachment A attached hereto and incorporated herein by this reference.

BE IT FURTHER RESOLVED this Resolution supercedes Resolution 01-006.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 19, 2001.

Original signed by

Dennis A. Dickerson
Executive Officer

Attachment A to Resolution No. 01-013

**Amendments
to the
Water Quality Control Plan – Los Angeles Region
for the
Los Angeles River Trash TMDL**

Amendments:

Table of Contents

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries
Los Angeles River Trash TMDL*

List of Figures, Tables and Inserts

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)
Tables

7-2 Los Angeles River Trash TMDL

7-2.1. Los Angeles River Trash TMDL Elements

7-2.2. Los Angeles River Trash TMDL Implementation
Schedule

7-2.3. Los Angeles River Trash TMDL Significant Dates

Chapter 3. Water Quality Objectives

Regional Objectives for Inland Surface Waters

Floating Material

3-9

A fourth paragraph will be added under Floating Material referencing specific guidelines for the Los Angeles River. Additional narrative to read: "See additional regulatory guidelines described under the Los Angeles River Trash Total Maximum Daily Load (Chapter 7)."

Solid, Suspended, or Settleable Materials

3-16

A fourth paragraph will be added under Solid, Suspended, or Settleable Materials referencing specific guidelines for the Los Angeles River. Additional narrative to read: "See additional regulatory guidelines described under the Los Angeles River Trash Total Maximum Daily Load (Chapter 7)."

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries Los Angeles River Trash TMDL*

This TMDL was adopted by:

The Regional Water Quality Control Board on September 19, 2001.

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

The following table summarizes the key elements of this TMDL.

Table 7-2.1 Los Angeles River: Trash TMDL Elements

Element	Derivation of Numbers
Problem Statement	Trash in the Los Angeles River is causing impairment of beneficial uses. The following designated beneficial uses are impacted by trash: water contact recreation (REC1); non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD); estuarine habitat (EST); marine habitat (MAR); rare and threatened or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction and early development of fish (SPWN); commercial and sport fishing (COMM); shellfish harvesting (SHELL); wetland habitat (WET); and cold freshwater habitat (COLD).
Numeric Target <i>(interpretation of the narrative water quality objective, used to calculate the load allocations)</i>	Zero trash in the river.
Source Analysis	Stormwater discharge is the major source of trash in the river.
Loading Capacity	Zero.
Load Allocations	Phased reduction for a period of 10 years, from existing baseline load to zero (0).
Implementation	This TMDL will be implemented through stormwater permits and <u>via the authority vested in the Executive Officer by section 13267 of the Porter-Cologne Water Quality Control Act: (Water Code section 13000 et seq.).</u>
Margin of Safety	"Zero discharge" is a conservative standard which contains an implicit margin of safety.
Seasonal Variations and Critical Conditions	Discharge of trash from the storm drain occurs primarily during or shortly after a rain event of greater than 0.25 inches.

*The complete administrative record for the TMDL is available for review upon request.

**State of California
California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. 01-014
September 19, 2001**

**Amendment to the Water Quality Control Plan for the Los Angeles Region
to Incorporate a Total Maximum Daily Load for Trash in the Ballona Creek and
Wetland.**

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles
Region, finds that:**

1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality objectives which are sufficient to protect beneficial uses for each water body found within its region.
2. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the USEPA to complete Total Maximum Daily Loads (TMDLs) for all impaired waters within 13 years. A schedule was established in the consent decree for the completion of the first 29 TMDLs within 7 years. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
3. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)). The regulations in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.
4. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). This Water Quality Control Plan for the Los Angeles Region (Basin Plan), and applicable statewide plans, serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
5. Ballona Creek is located in Los Angeles County, California. Ballona Creek flows slightly over 10 miles from the City of Los Angeles, through Culver City, reaching the ocean at Playa del Rey. Adjacent to the downstream channel of Ballona Creek are the Marina del Rey Harbor, Ballona Lagoon, Venice Canals, Del Rey Lagoon, and Ballona Wetlands.

6. On January 25, 2001, the Regional Board adopted a Basin Plan Amendment (Resolution 01-006) incorporating the Los Angeles River Trash TMDL into the Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties.
7. Staff have since proposed changes to the January 25, 2001 Los Angeles River Trash TMDL to provide clarifying language and greater flexibility in the TMDL implementation. The Los Angeles River Trash TMDL is to be used as a template for the Ballona Creek Trash TMDL.
8. On September 19, 2001, prior to the Board's action on this resolution, public hearings were conducted on the Los Angeles River Trash TMDL and the Ballona Creek Trash TMDL. Notice of the hearing for the Ballona Creek Trash TMDL was published in accordance with the requirements of Water Code section 13244. The first notice was published in the Los Angeles Times on June 21, 22, and 23, 2001, for a September 13, hearing. This hearing was rescheduled for September 19, 2001 and notice of this change was published in the Los Angeles Times on September 6, 2001.
9. The entire administrative record, from the Los Angeles River Trash TMDL, including the transcripts from the January 25, 2001 and September 19, 2001 public hearings, has been incorporated into the administrative record by reference for the Ballona Creek Trash TMDL to be considered for this resolution.
10. The public has had reasonable opportunity to participate in review of the amendment to the Basin Plan. Efforts to solicit public review and comment include release of a preliminary draft of the Los Angeles River Trash TMDL on March 17, 2000, seven public workshops, meetings with every stakeholder who requested such (ten meetings), initial adoption of the Los Angeles River Trash TMDL on January 25, 2001, release of the initial Ballona Creek Trash TMDL on March 9, 2001, a public hearing on September 19, 2001, and responses from the Regional Board staff to oral and written comments received from the public.
11. In amending the Basin Plan, the Regional Board considered the factors set forth in sections 13240 and 13241 of the Water Code.
12. The amendment is consistent with the State Anti-degradation Policy (State Board Resolution No. 69-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Anti-degradation Policy (40 CFR 131.12).
13. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code section 21000 et seq.).
14. Revision of water quality objectives for trash is subject to approval by the State Water Resources Control Board, the State Office of Administrative Law, and the US Environmental Protection Agency.

THEREFORE, be it resolved that pursuant to sections 13240 and 13241 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. Amend Chapter 3 and Chapter 7 of the Los Angeles Region Water Quality Control Plan to incorporate the elements of the Ballona Creek Trash TMDL as described in Attachment A attached hereto and incorporated herein by this reference.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 19, 2001.

Original signed by

Dennis A. Dickerson
Executive Officer

Attachment A to Resolution No. 01-014

**Amendments
to the
Water Quality Control Plan – Los Angeles Region
for the
Ballona Creek Trash TMDL**

Amendments:

Table of Contents

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries
Ballona Creek Trash TMDL*

List of Figures, Tables and Inserts

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)
Tables

7-3 Ballona Creek Trash TMDL

7-3.1. Ballona Creek Trash TMDL Elements

7-3.2. Ballona Creek Trash TMDL Implementation Schedule

7-3.3. Ballona Creek Trash TMDL Significant Dates

Chapter 3. Water Quality Objectives

Regional Objectives for Inland Surface Waters

Floating Material

3-9

A fifth paragraph will be added under Floating Material referencing specific guidelines for Ballona Creek. Additional narrative to read: "See additional regulatory guidelines described under the Ballona Creek Trash Total Maximum Daily Load (Chapter 7)."

Solid, Suspended, or Settleable Materials

3-16

A fifth paragraph will be added under Solid, Suspended, or Settleable Materials referencing specific guidelines for the Ballona Creek. Additional narrative to read: "See additional regulatory guidelines described under the Ballona Creek Trash Total Maximum Daily Load (Chapter 7)."

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries Ballona Creek Trash TMDL*

This TMDL was adopted by:

The Regional Water Quality Control Board on September 19, 2001.

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

The following table summarizes the key elements of this TMDL.

Table 7-3.1 Ballona Creek: Trash TMDL Elements

Element	Derivation of Numbers
<i>Problem Statement</i>	Trash in Ballona Creek is causing impairment of beneficial uses. The following designated beneficial uses are impacted by trash: water contact recreation (REC1); non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD); estuarine habitat (EST); marine habitat (MAR); rare and threatened or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction and early development of fish (SPWN); commercial and sport fishing (COMM); shellfish harvesting (SHELL); wetland habitat (WET); and cold freshwater habitat (COLD).
<i>Numeric Target</i> (interpretation of the narrative water quality objective, used to calculate the load allocations)	Zero trash in the creek and wetland.
<i>Source Analysis</i>	Stormwater discharge is the major source of trash in the creek.
<i>Loading Capacity</i>	Zero.
<i>Waste Load, Allocations</i>	Phased reduction for a period of 10 years, from existing baseline load to zero.
<i>Implementation</i>	This TMDL will be implemented through stormwater permits and via the authority vested in the Executive Officer by section 13267 of the Porter-Cologne Water Quality Control Act: Water Code section 13000 et seq.).
<i>Margin of Safety</i>	"Zero discharge" is a conservative standard which contains an implicit margin of safety.
<i>Seasonal Variations and Critical Conditions</i>	Discharge of trash from the storm drain occurs primarily during or shortly after a rain event of greater than 0.25 inches.

*The complete administrative record for the TMDL is available for review upon request.

Table 7-3.2 Ballona Creek Trash TMDL: Implementation Schedule.
(Default waste load allocations expressed as cubic feet of uncompressed trash and % reduction.)

Year	Baseline Monitoring/ Implementation	Waste Load Allocation	Compliance Point
1 10/1/01-- 9/30/02	Baseline Monitoring	No allocation specified. Trash will be reduced by levels collected during the baseline monitoring program.	Achieved through timely compliance with baseline monitoring program.
2 10/1/02-- 9/30/03	Baseline Monitoring	No allocation specified. Trash will be reduced by levels collected during the baseline monitoring program.	Achieved through timely compliance with baseline monitoring program.
3 10/1/03-- 9/30/04	Baseline Monitoring (optional)/ Implementation: Year 1	90% (9,985 for the Municipal permittees, 1,472 for Caltrans)	No compliance point (target of 90%)
4 10/1/04-- 9/30/05	Baseline Monitoring (optional)/ Implementation: Year 2	80% (8,875 for the Municipal permittees, 1,308 for Caltrans)	No compliance point (target of 80%)
5 10/1/05-- 9/30/06	Implementation: Year 3	70% (7,776 for the Municipal permittees; 1,146 for Caltrans)	Compliance is 80% of the baseline load calculated as a rolling 3-year annual average (8,875 for the Municipal permittees; 1,308 for Caltrans).
6 10/1/06-- 9/30/07	Implementation: Year 4	60% (6,656 for the Municipal permittees; 981 for Caltrans)	70% of the baseline load the baseline load calculated as a rolling 3-year annual average (7,776 for the Municipal permittees; 1,146 for Caltrans).
7 10/1/07-- 9/30/08	Implementation: Year 5 ¹	50% (5,547 for the Municipal permittees; 818 for Caltrans)	60% of the baseline load calculated as a rolling 3-year annual average (6,656 for the Municipal permittees; 981 for Caltrans)
8 10/1/08-- 9/30/09	Implementation: Year 6	40% (4,438 for the Municipal permittees; 654 for Caltrans)	50% of the baseline load calculated as a rolling 3-year annual average (5,547 for the Municipal permittees; 818 for Caltrans).
9 10/1/09-- 9/30/10	Implementation: Year 7	30% (3,328 for the Municipal permittees; 491 for Caltrans)	40% of the baseline load calculated as a rolling 3-year annual average (4,438 for the Municipal permittees; 654 for Caltrans).
10 10/1/10-- 9/30/11	Implementation: Year 8	20% (2,218 for the Municipal permittees; 327 for Caltrans).	30% of the baseline load calculated as a rolling 3-year annual average (3,328 for the Municipal permittees; 491 for Caltrans).
11 10/1/11-- 9/30/12	Implementation: Year 9	10% (1,110 for the Municipal permittees; 164 for Caltrans).	20% of the baseline load calculated as a rolling 3-year annual average (2,220 for the Municipal permittees; 327 for Caltrans).
12 10/1/12-- 9/30/13	Implementation: Year 10	0 or 0 % of the baseline load.	10% of the baseline load calculated as a rolling 3-year annual average (1,110 for the Municipal permittees; 164 for Caltrans).
13 10/1/13-- 9/30/14	Implementation: Year 11	0 or 0 % of the baseline load.	3.3 % of the baseline load calculated as a rolling 3-year annual average (366 for the Municipal permittees, 54 for Caltrans).
14 10/1/14-- 9/30/15	Implementation: Year 12	0 or 0 % of the baseline.	0 or 0 % of the baseline load.

¹ A review of the current target will be allowed once a reduction of 50% has been achieved and sustained.

Table 7-3.3. Ballona Creek Trash TMDL: Significant Dates.

30 days after receipt of the Executive Officer's request as authorized by Section 13267 of the Water Code.	Submit baseline monitoring plan(s).
120 days after receipt of the Executive Officer's request as authorized by Section 13267 of the Water Code.	List of facilities that are outside of the permittee's jurisdiction but drain to a portion of the permittee's storm drain system, which discharges to Ballona Creek.
Within the first 2 years after approval of this basin plan amendment; to be extended to 4 years at the option of the permittees	Collection of baseline data.
72 hours after each rain event	Clean out of and measurement of trash retained.
Every 3 months during dry weather	Clean out of and measurement of trash retained.

**State of California
California Regional Water Quality Control Board, Los Angeles Region**

RESOLUTION NO. 01-018

October 25, 2001

**Amendment to the *Water Quality Control Plan for the Los Angeles Region* to Update the
Bacteria Objectives for Water Bodies Designated for Water Contact Recreation**

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality objectives which are sufficient to protect beneficial uses designated for each water body found within its region.
2. The proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) was developed in accordance with section 13241 of the Porter-Cologne Water Quality Control Act (California Water Code, Division 1, Chapter 4, Article 3).
3. The current Basin Plan contains total and fecal coliform bacteria objectives to protect waters designated for water contact recreation based on recommendations made by the U.S. EPA in 1976.
4. The amendment proposed for adoption into the Basin Plan will update the current bacteria objectives for waters designated for water contact recreation to include objectives for enterococcus, the ratio of fecal-to-total coliforms, and e. coli in addition to objectives for total and fecal coliform.
5. The amendment will revise Chapter 3 "Water Quality Objectives" of the Basin Plan.
6. The proposed amendment is based on more recent epidemiological studies and research on the most appropriate bacterial indicators.
7. Specifically, in 1983 and 1984, additional epidemiological studies were conducted by the U.S. EPA to determine the most appropriate bacterial indicators and corresponding objectives for waters designated for water contact recreation.
8. Based on these epidemiological studies, in 1986 the U.S. EPA revised its recommended bacteria criteria for waters designated for water contact recreation to include enterococcus for marine waters and enterococcus or e. coli for fresh waters.
9. In 1995, the Santa Monica Bay Restoration Project sponsored a local epidemiological study to determine the most appropriate bacterial indicators and corresponding objectives for marine waters designated for water contact recreation.
10. Based on the Santa Monica Bay epidemiological study and other national studies, the California State Legislature passed a law (Assembly Bill 411 (1997)) requiring the California Department of Health Services (Department) to establish minimum protective bacterial standards for waters adjacent to beaches, which include standards for total coliform, fecal

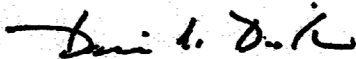
coliform, and enterococci bacteria, or for other microbiological indicators that the Department determines are appropriate.

11. The Department adopted regulations in 1999 that establish minimum protective bacterial standards for waters adjacent to beaches, including objectives for total coliform, fecal coliform and enterococcus as well as an objective for the ratio of fecal-to-total coliforms.
12. In March 1999, the U.S. EPA made a commitment in its *Action Plan for Beaches and Recreational Waters* that "where a State does not amend its water quality standards to include the 1986 criteria, EPA will act under Section 303(c) of the Clean Water Act to promulgate the criteria with the goal of assuring that the 1986 criteria apply in all states no later than 2003."
13. The U.S. EPA's 1986 bacteria criteria and the bacteria standards contained in the California Code of Regulations, title 17, section 7958 represent the best science available.
14. The Regional Board has considered the costs of implementing the amendment, and finds these costs to be a reasonable burden relative to the environmental benefits.
15. The proposed amendment results in no potential for adverse effect, either individually or cumulatively, on wildlife.
16. The regulatory action proposed meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
17. The amendment is consistent with the State Antidegradation Policy (State Water Resources Control Board (SWRCB) Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
18. The basin planning process has been certified as 'functionally equivalent' to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code, Section 21000 et seq.).
19. Regional Board staff has prepared a staff report dated July 31, 2001, describing the proposed amendment, and sent the staff report to all known interested persons to allow a 45-day public comment period in advance of the public hearing.
20. The Regional Board held a public hearing on October 25, 2001, for the purpose of receiving testimony on the proposed Basin Plan amendment. Notice of the public hearing was sent to all interested persons and published in accordance with California Water Code, section 13244.
21. The Basin Plan amendment must be submitted for review and approval by the SWRCB, Office of Administrative Law (OAL), and U.S. EPA. Once approved by the SWRCB, the amendment is submitted to OAL and U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. A Notice of Decision will be filed.

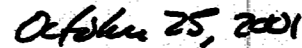
THEREFORE, be it resolved that

1. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to the Water Quality Control Plan for the Los Angeles Region as set forth in the attachment.
2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the SWRCB in accordance with the requirements of section 13245 of the California Water Code.
3. The Regional Board requests that the SWRCB approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the U.S. EPA.
4. If during its approval process the SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
5. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 25, 2001.



Dennis A. Dickerson
Executive Officer



Date

ATTACHMENT

In Chapter 3 "Water Quality Objectives" of the Basin Plan, replace Paragraph 2 under "Bacteria, Coliform" on p. 3-3 with the following:

In Marine Waters Designated for Water Contact Recreation (REC-1)

1. Geometric Mean Limits

- a. Total coliform density shall not exceed 1,000/100 ml.
- b. Fecal coliform density shall not exceed 200/100 ml.
- c. Enterococcus density shall not exceed 35/100 ml.

2. Single Sample Limits

- a. Total coliform density shall not exceed 10,000/100 ml.
- b. Fecal coliform density shall not exceed 400/100 ml.
- c. Enterococcus density shall not exceed 104/100 ml.
- d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

In Fresh Waters Designated for Water Contact Recreation (REC-1)

1. Geometric Mean Limits

- a. *E. coli* density shall not exceed 126/100 ml.
- b. Fecal coliform density shall not exceed 200/100 ml.

2. Single Sample Limits

- a. *E. coli* density shall not exceed 235/100 ml.
- b. Fecal coliform density shall not exceed 400/100 ml.

Implementation Provisions for Water Contact Recreation Bacteria Objectives

The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

If any of the single sample limits are exceeded, the Regional Board may require repeat sampling on a daily basis until the sample falls below the single sample limit in order to determine the persistence of the exceedance.

When repeat sampling is required because of an exceedance of any one single sample limit, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

**State of California
California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. 2002-011
April 25, 2002**

Amendment to the *Water Quality Control Plan for the Los Angeles Region* to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of "Aquatic Life"

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality objectives which are sufficient to protect beneficial uses designated for each water body found within its region.
2. The proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) was developed in accordance with section 13241 of the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Chapter 4, Article 3).
3. The current Basin Plan contains ammonia objectives to protect inland surface waters supporting aquatic life. These objectives are based on U.S. EPA criteria adopted in 1984.
4. The amendment proposed for adoption into the Basin Plan will update the current ammonia objectives for inland surface waters, with the exception of enclosed bays and estuaries *not* characteristic of freshwater as described in the amendment, supporting aquatic life to include:
 - (A) Greater recognition of the temperature dependence of the chronic objective, especially at low temperatures.
 - (B) An Early Life Stage (ELS) chronic objective.
 - (C) A 30-day averaging period for the chronic objective instead of a 4-day averaging period.

In addition:

 - (A) The acute objective is no longer temperature dependent.
 - (B) The chronic objective is no longer dependent on the fish species present.
5. For enclosed bays and estuaries *not* characteristic of freshwater, the existing ammonia objectives contained in the 1994 Basin Plan shall remain in effect until the Regional Board determines the most appropriate objectives for these water bodies.
6. The Regional Board recognizes that the existing Basin Plan includes a provision that required compliance with existing Basin Plan ammonia objectives by June 13, 2002. While the amendment removes the 8-year compliance provision, it does so in recognition that the revised objectives are no more stringent, and in fact generally are less stringent, than the existing objectives. The removal of the 8-year compliance language will not result in an impact to dischargers because the Basin Plan amendment will not take effect, given the need for State Board, Office of Administrative Law, and US EPA review and approval, until after the expiration of the 8-year compliance language.

7. The amendment will revise Chapter 3 "Water Quality Objectives" of the Basin Plan and include implementation language.
8. The proposed amendment is based on acute and chronic toxicity data published since 1985.
9. Specifically, as a result of these revisions, the acute objective for ammonia is now dependent on pH and fish species, and the chronic objective is dependent on pH and temperature. At lower temperatures, the chronic objective is also dependent on the presence or absence of early life stages of fish (ELS).
10. For the cold water acute objective, the new objective is higher than the old objective except in the pH range of 7.25-8.25 where the temperature is between 0 and 15 degrees Celsius or 32 to 59 degrees Fahrenheit. For the warm water acute objective, the new objective is higher at all temperature and pH values.
11. The new chronic objectives for ammonia are higher than the objectives currently in the Basin Plan in all cases.
12. The proposed amendment provides implementation language to determine whether a water body is characteristic of freshwater, brackish water or saltwater to determine which objectives should be applied. Water bodies that are *not* characteristic of freshwater are defined as those in which the salinity is greater than 1 part per thousand 95% or more of the time.
13. Water bodies with a Basin Plan designation of "SPWN" support high quality aquatic habitats suitable for reproduction and early development of fish and, therefore, these water bodies are designated as Early Life Stage (ELS) present waters.
14. Where threatened or endangered species are present, the amendment requires that more stringent, site-specific modifications of the objectives be performed.
15. The proposed amendment utilizes methods similar to that contained in the Technical Support Document for Water Quality-based Toxics Control (US EPA 1991) and Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (also known as the SIP) to translate the objectives contained in this proposed amendment into effluent limits in the absence of a TMDL.
16. The Regional Board has considered the costs of implementing the amendment, and other factors, as required by the California Water Code, section 13241.
17. The proposed amendment results in no or *de minimis* potential for adverse effect, either individually or cumulatively, on wildlife.
18. The regulatory action proposed meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
19. The amendment is consistent with the State Antidegradation Policy (State Water Resources Control Board (SWRCB) Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).


20. The basin planning process has been certified as 'functionally equivalent' to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code, Section 21000 et seq.).
21. Regional Board staff prepared a staff report dated February 4, 2002, describing the proposed amendment, and sent the staff report to all known interested persons to allow a 45-day public comment period in advance of the public hearing.
22. Regional Board staff prepared a revised staff report and amendment language in response to public comments on the February 4, 2002 notice, and sent the staff report to all known interested persons on March 22, 2002 to allow an additional 30-day comment period on the revisions in advance of the public hearing.
23. The Regional Board held a public hearing on April 25, 2002, for the purpose of receiving testimony on the proposed Basin Plan amendment. Notice of the public hearing was sent to all known interested persons and published in accordance with California Water Code, section 13244.
24. At the April 25, 2002, Board meeting, the Regional Board narrowed the scope of the March 22, 2002, proposed action, so that the updated ammonia objectives would not apply to enclosed bays and estuaries that are *not* characteristic of freshwater. The April 25, 2002, narrowing provided that existing ammonia objectives would remain in effect for enclosed bays and estuaries that are *not* characteristic of freshwater.
25. In addition, the Regional Board directed staff to conduct further study of two related issues. The first issue is a review of the ammonia objectives for enclosed bays and estuaries that are *not* characteristic of freshwater, and the second issue is an evaluation of soft-bottom aquatic habitats to assess their suitability for early life stage (ELS) fish. If warranted, based upon further review, a Basin Plan amendment addressing these issues is to be presented for the Regional Board's consideration within one year after this action.
26. The Basin Plan amendment must be submitted for review and approval by the State Water Resources Control Board (State Board), Office of Administrative Law (OAL), and U.S. EPA. Once approved by the State Board, the amendment is submitted to OAL and U.S. EPA. The Basin Plan amendment will become effective for state law purposes upon approval by OAL. For purposes of federal law, the Basin Plan amendment will be effective upon approval by both OAL and U.S. EPA. A Notice of Decision will be filed.

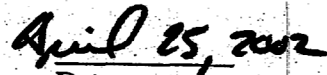
THEREFORE, be it resolved that

1. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to the Water Quality Control Plan for the Los Angeles Region, to amend the water quality objective for ammonia in inland surface waters (including enclosed bays, estuaries and wetlands) as set forth in Attachment A.
2. The Regional Board staff shall convene a technical advisory group to further investigate the most appropriate ways to identify ELS-present waterbodies and shall present the findings of this group to the Regional Board within one year after Regional Board adoption of this resolution.

3. The Regional Board shall bring another Basin Plan amendment before the Regional Board within one year after the adoption of this resolution to update the ammonia objectives for inland surface waters (i.e., enclosed bays and estuaries) that are *not* characteristic of freshwater.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
5. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the U.S. EPA.
6. If during its approval process the State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
7. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 25, 2002.


Dennis A. Dickerson
Executive Officer


Date

State of California
California Regional Water Quality Control Board, Los Angeles Region

RESOLUTION NO. 2002-022
December 12, 2002

Amendment to the Water Quality Control Plan (Basin Plan) for the Los Angeles Region to Incorporate Implementation Provisions for the Region's Bacteria Objectives and to Incorporate a Wet-Weather Total Maximum Daily Load for Bacteria at Santa Monica Bay Beaches

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) to develop water quality standards which include beneficial use designations and criteria to protect beneficial uses for each water body found within its region.
2. The Regional Board carries out its CWA responsibilities through California's Porter-Cologne Water Quality Control Act and establishes water quality objectives designed to protect beneficial uses contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan).
3. Section 303(d) of the CWA requires states to identify and to prepare a list of water bodies that do not meet water quality standards and then to establish load and waste load allocations, or a total maximum daily load (TMDL), for each water body that will ensure attainment of water quality standards and then to incorporate those allocations into their water quality control plans.
4. Many of the beaches along Santa Monica Bay were listed on California's 1998 section 303(d) list, due to impairments for coliform or for beach closures associated with bacteria generally. The beaches appeared on the 303(d) list because the elevated bacteria and beach closures prevented full support of the beaches' designated use for water contact recreation (REC-1).
5. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the USEPA to complete TMDLs for all the Los Angeles Region's impaired waters within 13 years. A schedule was established in the consent decree for the completion of 29 TMDLs within 7 years, including completion of a TMDL to reduce bacteria at Santa Monica Bay beaches by March 2002. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
6. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (e.g., USEPA, 1991). A TMDL is defined as "the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background" (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at "levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations

and water quality" (40 CFR 130.7(c)(1)). The provisions in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.

7. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
8. Santa Monica Bay is located in Los Angeles County, California. The proposed TMDL addresses documented bacteriological water quality impairments at 44 beaches from the Los Angeles/Ventura County line, to the northwest, to Outer Cabrillo Beach, just south of the Palos Verdes Peninsula.
9. The Regional Board is establishing the above-mentioned TMDL to preserve and enhance the water quality at Santa Monica Bay beaches and for the benefit of the 55 million beachgoers, on average, that visit these beaches each year. At stake is the health of swimmers and surfers and associated health costs as well as sizeable revenues to the local and state economy. Estimates are that visitors to Santa Monica Bay beaches spend approximately \$1.7 billion annually.
10. The Regional Board's goal in establishing the above-mentioned TMDL is to reduce the risk of illness associated with swimming in marine waters contaminated with bacteria. Local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects, such as gastroenteritis and upper respiratory illness, and recreational water quality, as measured by bacteria indicator densities. The water quality objectives on which the TMDL numeric targets are based will ensure that the risk of illness to the public from swimming at Santa Monica Bay beaches generally will be no greater than 19 illnesses per 1,000 swimmers, which is defined by the US EPA as an "acceptable health risk" in marine recreational waters.
11. Interested persons and the public have had reasonable opportunity to participate in review of the amendment to the Basin Plan. Efforts to solicit public review and comment include staff presentations to the Santa Monica Bay Restoration Project's Bay Watershed Council and Technical Advisory Committee between May 1999 and October 2001 and creation of a Steering Committee in July 1999 to provide input on scientific and technical components of the TMDL with participation by the Southern California Coastal Water Research Project, City of Los Angeles, County of Los Angeles Department of Public Works, County Sanitation Districts of Los Angeles County, Heal the Bay, and Santa Monica Bay Restoration Project.
12. A first draft of the TMDL for bacteria at Santa Monica Bay beaches was released for public comment on November 9, 2001; an interim draft TMDL covering wet weather only was released on June 21, 2002, for discussion at a public workshop; and a public workshop on the draft Wet-Weather TMDL was held on June 27, 2002 at a regularly scheduled Regional Board meeting.
13. A final draft of the Wet-Weather TMDL along with a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; Regional Board staff responded to oral and written comments received from the public; and the Regional Board

held a public hearing on September 26, 2002 to consider adoption of the Wet-Weather TMDL.

14. The Regional Board continued the item from the September 26, 2002 Board meeting to the December 12, 2002 Board meeting to give staff time to make revisions based on public comments and Board discussion at the September 26, 2002 Board meeting. Specifically, the Board wanted an implementation program that was reasonable and as short as practicable given the testimony on impairments to the REC-1 beneficial use.
15. The Regional Board recognizes that there are two broad approaches to implementing the TMDL. One approach is an integrated water resources approach that takes a holistic view of regional water resources management by integrating planning for future wastewater, storm water, recycled water, and potable water needs and systems; focuses on beneficial re-use of storm water, including groundwater infiltration, at multiple points throughout a watershed; and addresses multiple pollutants for which Santa Monica Bay or its watershed are listed on the CWA section 303(d) List as impaired. The other approach is a non-integrated water resources approach.

Some responsible jurisdictions and agencies have indicated a preference to take an integrated water resources approach to realize the benefits of re-using storm water to preserve local groundwater resources and to reduce reliance on imported water. The Regional Board recognizes that an integrated water resources approach not only provides water quality benefits to the people of the Los Angeles Region, but also recognizes that the responsible jurisdictions implementing this TMDL can serve a variety of public purposes by adopting an integrated water resources approach. An integrated water resources approach will address multiple pollutants, and as a result, responsible jurisdictions can recognize cost-savings because capital expenses for the integrated approach will implement several TMDLs that address pollutants in storm water. In addition, jurisdictions serve multiple roles for their citizenry, and an integrated approach allows for the incorporation and enhancement of other public goals such as water supply, recycling and storage; environmental justice; parks, greenways and open space; and active and passive recreational and environmental education opportunities.

The Regional Board acknowledges that a longer timeframe is reasonable for an integrated water resources approach because it requires more complicated planning and implementation such as identifying markets for the water and efficiently siting storage and transmission infrastructure within the watershed(s) to realize the multiple benefits of such an approach.

16. Therefore, after considering testimony, the Regional Board directed staff to adjust the implementation provisions of the TMDL to allow for a longer implementation schedule (up to 18 years) only when the responsible jurisdictions and agencies clearly demonstrate their intention to undertake an integrated water resources approach and justify the need for a longer implementation schedule. In contrast, testimony indicated that a shorter implementation schedule (up to 10 years) is reasonable and practicable for non-integrated approaches because the level of planning is not as complicated.
17. A revised draft of the Basin Plan amendment and Tentative Resolution were circulated 45 days preceding Board action. Regional Board staff responded to oral and written comments received from the public on the revised draft. The Regional Board held a second public hearing on December 12, 2002 to consider adoption of the Wet-Weather TMDL.

18. On October 25, 2001, the Regional Board adopted Resolution 2001-018 establishing revised bacteriological water quality objectives for the Water Contact Recreation (REC-1) beneficial use, and the TMDL is intended to accompany and to implement the revised water quality objectives. The State Water Resources Control Board approved the Regional Board's Basin Plan amendment on July 18, 2002 in State Board Resolution 2002-0142, the Office of Administrative Law approved it on September 19, 2002 in OAL File No. 02-0807-01-S, and the US EPA approved it on September 25, 2002.
19. Under certain circumstances and through the TMDL development process, the Regional Board proposes to implement the aforementioned revised bacteria objectives using either a 'reference system/anti-degradation approach' or a 'natural sources exclusion approach.' As required by the CWA and Porter-Cologne Water Quality Control Act, the Basin Plan includes beneficial uses of waters, water quality objectives to protect those uses, an anti-degradation policy, collectively referred to as water quality standards, and other plans and policies necessary to implement water quality standards. This TMDL and its associated waste load allocations, which will be incorporated into relevant permits, are the vehicles for implementation of the bacteria standards as required under Water Code section 13242.
20. Both the 'reference system/anti-degradation approach' and the 'natural sources exclusion approach' recognize that there are natural sources of bacteria that may cause or contribute to exceedances of the single sample objectives.
21. The Regional Board's intent in implementing the bacteria objectives using a 'reference system/anti-degradation approach' is to ensure that bacteriological water quality is at least as good as that of a reference site and that no degradation of existing bacteriological water quality is permitted where existing bacteriological water quality is better than that of a reference site. The Regional Board's intent in implementing the bacteria objectives using a 'natural sources exclusion approach' is to ensure that all anthropogenic sources of bacteria are controlled such that they do not cause an exceedance of the single sample objectives. These approaches are consistent with state and federal anti-degradation policies (State Board Resolution No. 68-16 and 40 C.F.R. 131.12), while acknowledging that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas. While treatment and diversion of natural sources may fully address the impairment of the water contact recreation beneficial use, such an approach may adversely affect valuable aquatic life and wildlife beneficial uses in the Region.
22. For the Wet-Weather and Dry-Weather Bacteria TMDLs at Santa Monica Bay beaches, Leo Carrillo Beach and its associated drainage area, Arroyo Sequit Canyon, were selected as the local reference system until other reference sites or approaches are evaluated and the necessary data collected to support the use of alternative reference sites or approaches when the TMDL is revised four years after the effective date. Leo Carrillo Beach was selected as the interim reference site because it best met the three criteria for selection of a reference system. Specifically, its drainage is the most undeveloped subwatershed in the larger Santa Monica Bay watershed, the subwatershed has a freshwater outlet (i.e., creek) to the beach, and adequate historical shoreline monitoring data were available. It is the intent of the Regional Board to re-evaluate the use of Leo Carrillo Beach due to potential problems arising from the heavy recreational use of the beach and the close proximity of two campgrounds.
23. Northern Bay beach monitoring sites are fewer in number and provide less comprehensive data than the extensive shoreline monitoring network elsewhere in Santa Monica Bay.

24. The numeric targets in this TMDL are not water quality objectives and do not create new bases for enforcement against dischargers apart from the water quality objectives they translate. The targets merely establish the bases through which load allocations and wasteload allocations (WLAs) are calculated. WLAs are only enforced for a discharger's own discharges, and then only in the context of its National Pollutant Discharge Elimination System (NPDES) permit, which must be consistent with the assumptions and requirements of the WLA. The Regional Board will develop permit requirements through a subsequent permit action that will allow all interested persons, including but not limited to municipal storm water dischargers, to provide comments on how the waste load allocations will be translated into permit requirements.
25. The Regional Board has the authority to authorize compliance schedules through the basin planning process. In this Basin Plan amendment, the Regional Board establishes a schedule for implementation that affords the responsible jurisdictions and agencies up to ten or eighteen years, depending on the implementation approaches pursued, to implement this Wet-Weather Bacteria TMDL.
26. Previously, the Regional Board adopted a Dry-Weather Bacteria TMDL for the Santa Monica Bay Beaches. The Dry-Weather TMDL includes implementation provisions contained in Table 7-4.3 of the Basin Plan, including a provision to reconsider two years after the effective date the Dry-Weather TMDL and specifically the reference beach(es) used. Because that effort overlaps with reconsideration of the reference beach(es) anticipated by this Wet-Weather TMDL, the Regional Board proposes to coordinate the reconsiderations of the reference beach approach to assure efficiency and consistency in implementing the two Santa Monica Beaches TMDLs.
27. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents (Public Resources Code, Section 21000 et seq.) and as such, the required environmental documentation and CEQA environmental checklist have been prepared.
28. The proposed amendment results in no potential for adverse effect (de minimis finding), either individually or cumulatively, on wildlife.
29. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
30. The Basin Plan amendment incorporating a TMDL for bacteria at Santa Monica Bay beaches must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the USEPA. The Basin Plan amendment will become effective upon approval by OAL and USEPA. A Notice of Decision will be filed.

THEREFORE, be it resolved that pursuant to Section 13240 and 13242 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapters 3 and 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements of the Santa Monica

Bay Beaches Bacteria TMDL for wet weather and to implement the water quality objectives for bacteria set to protect the water contact recreation beneficial use.

2. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment B hereto, to amend Table 7-4.3 of the Santa Monica Bay Beaches Bacteria TMDL for dry weather to change the date for revision of the TMDL from two years after the effective date to four years after the effective date [of the Wet-Weather TMDL] to achieve consistency in scheduling between the Dry-Weather and Wet-Weather TMDLs.
3. The Executive Officer is directed to exercise authority under Water Code section 13267, or other applicable law, to require additional monitoring data in the northern Bay beach regions to ensure that wet weather bacteria exposure is adequately quantified before the TMDL is reconsidered in four years.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
5. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the USEPA.
6. If during its approval process the State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
7. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 12, 2002.

ORIGINAL SIGNED BY

Dennis A. Dickerson
Executive Officer

Attachment A to Resolution No. 2002-022
Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate
Implementation Provisions for the Region's Bacteria Objectives and to incorporate the
Santa Monica Bay Beaches Wet-Weather Bacteria TMDL

Adopted by the California Regional Water Quality Control Board, Los Angeles Region on December 12, 2002.

Amendments:

List of Figures, Tables and Inserts

Add under Chapter 7, Section 7-4 (Santa Monica Bay Beaches Bacteria TMDL):

Tables

7-4.4. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Elements

7-4.5. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Final Allowable
Exceedance Days by Beach Location

7-4.6. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Interim Compliance
Targets by Jurisdictional Groups

7-4.7. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Significant Dates

Chapter 3. Water Quality Objectives, "Bacteria, Coliform"

Add under "Implementation Provisions for Water Contact Recreation Bacteria Objectives"

The single sample bacteriological objectives shall be strictly applied except when provided for in a Total Maximum Daily Load (TMDL). In all circumstances, including in the context of a TMDL, the geometric mean objectives shall be strictly applied. In the context of a TMDL, the Regional Board may implement the single sample objectives in fresh and marine waters by using a 'reference system/antidegradation approach' or 'natural sources exclusion approach' as discussed below. A reference system is defined as an area and associated monitoring point that is not impacted by human activities that potentially affect bacteria densities in the receiving water body.

These approaches recognize that there are natural sources of bacteria, which may cause or contribute to exceedances of the single sample objectives for bacterial indicators. They also acknowledge that it is not the intent of the Regional Board to require treatment or diversion of natural water bodies or to require treatment of natural sources of bacteria from undeveloped areas. Such requirements, if imposed by the Regional Board, could adversely affect valuable aquatic life and wildlife beneficial uses supported by natural water bodies in the Region.

Under the reference system/antidegradation implementation procedure, a certain frequency of exceedance of the single sample objectives above shall be permitted on the basis of the observed exceedance frequency in the selected reference system or the targeted water body, whichever is less. The reference system/anti-degradation approach ensures that bacteriological water quality is at least as good as that of a reference system and that no degradation of existing bacteriological water quality is permitted where existing bacteriological water quality is better than that of the selected reference system.

Under the natural sources exclusion implementation procedure, after all anthropogenic sources of bacteria have been controlled such that they do not cause or contribute to an exceedance of the single sample objectives and natural sources have been identified and quantified, a certain frequency of exceedance of the single sample objectives shall be permitted based on the residual exceedance frequency in the specific water body. The residual exceedance frequency shall define the background level of exceedance due to natural sources. The 'natural sources exclusion' approach may be used if an appropriate reference system cannot be identified due to unique characteristics of the target water body. These approaches are

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consistent with the State Antidegradation Policy (State Board Resolution No. 68-16) and with federal antidegradation requirements (40 CFR 131.12).

The appropriateness of these approaches and the specific exceedance frequencies to be permitted under each will be evaluated within the context of TMDL development for a specific water body, at which time the Regional Board may select one of these approaches, if appropriate.

These implementation procedures may only be implemented within the context of a TMDL addressing municipal storm water, including the municipal storm water requirements of the Statewide Permit for Storm Water Discharges from the State of California Department of Transportation (Caltrans), and non-point sources discharges. These implementation provisions do not apply to NPDES discharges other than MS4 discharges.¹

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries, Section 7-4 (Santa Monica Bay Beaches Bacteria TMDL)

Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only)*

This TMDL was adopted by the Regional Water Quality Control Board on December 12, 2002.

This TMDL was approved by:

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

The following table summarizes the key elements of this TMDL.

¹ Municipal storm water discharges in the Los Angeles Region are those with permits under the Municipal Separate Storm Sewer System (MS4) NPDES Program. For example, the MS4 permits at the time of this amendment are the Los Angeles County Municipal Storm Water NPDES Permit, Ventura County Municipal Storm Water NPDES Permit, City of Long Beach Municipal Storm Water NPDES Permit, and elements of the statewide storm water permit for the California Department of Transportation (Caltrans).
Final – 12/12/02

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Table 7-4.4. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Elements

Element	Key Findings and Regulatory Provisions
Problem Statement	Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at many Santa Monica Bay (SMB) beaches. Swimming in waters with elevated bacterial indicator densities has long been associated with adverse health effects. Specifically, local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities.
Numeric Target <i>(Interpretation of the numeric water quality objective, used to calculate the waste load allocations)</i>	<p>The TMDL has a multi-part numeric target based on the bacteriological water quality objectives for marine water to protect the water contact recreation (REC-1) use. These targets are the most appropriate indicators of public health risk in recreational waters.</p> <p>These bacteriological objectives are set forth in Chapter 3 of the Basin Plan, as amended by the Regional Board on October 25, 2001. The objectives are based on four bacterial indicators and include both geometric mean limits and single sample limits. The Basin Plan objectives that serve as numeric targets for this TMDL are:</p> <ol style="list-style-type: none"> <u>1. Rolling 30-day Geometric Mean Limits</u> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 1,000/100 ml. b. Fecal coliform density shall not exceed 200/100 ml. c. Enterococcus density shall not exceed 35/100 ml. <u>2. Single Sample Limits</u> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 10,000/100 ml. b. Fecal coliform density shall not exceed 400/100 ml. c. Enterococcus density shall not exceed 104/100 ml. d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1. <p>These objectives are generally based on an acceptable health risk for marine recreational waters of 19 illnesses per 1,000 exposed individuals as set by the US EPA (US EPA, 1986). The targets apply throughout the year. The final compliance point for the targets is the wave wash² where there is a freshwater outlet (i.e., publicly-owned storm drain or natural creek) to the beach, or at ankle depth at beaches without a freshwater outlet.</p> <p>Implementation of the above bacteria objectives and the associated TMDL numeric targets is achieved using a 'reference system/anti-degradation approach' rather than the alternative 'natural sources exclusion approach' or strict application of the single sample objectives. As required by the CWA and Porter-Cologne Water Quality Control Act, Basin Plans include beneficial uses of waters, water quality objectives to protect those uses, an anti-degradation policy, collectively referred to as water quality standards, and other plans and policies necessary to implement water quality standards. This TMDL and its associated waste load allocations, which shall be incorporated into relevant permits, are the vehicles for implementation of the Region's</p>

² The wave wash is defined as the point at which the storm drain or creek empties and the effluent from the storm drain initially mixes with the receiving ocean water.

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Element	Key Findings and Regulatory Provisions
	<p>standards.</p> <p>The 'reference system/anti-degradation approach' means that on the basis of historical exceedance levels at existing shoreline monitoring locations, including a local reference beach within Santa Monica Bay, a certain number of daily exceedances of the single sample bacteria objectives are permitted. The allowable number of exceedance days is set such that (1) bacteriological water quality at any site is at least as good as at a designated reference site within the watershed and (2) there is no degradation of existing shoreline bacteriological water quality. This approach recognizes that there are natural sources of bacteria that may cause or contribute to exceedances of the single sample objectives and that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas.</p> <p>The geometric mean targets may not be exceeded at any time. The rolling 30-day geometric means will be calculated on each day. If weekly sampling is conducted, the weekly sample result will be assigned to the remaining days of the week in order to calculate the daily rolling 30-day geometric mean. For the single sample targets, each existing shoreline monitoring site is assigned an allowable number of exceedance days during wet weather, defined as days with 0.1 inch of rain or greater and the three days following the rain event. (A separate amendment incorporating the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL addressed the allowable number of summer and winter dry-weather exceedance days.)</p>
Source Analysis	<p>With the exception of isolated sewage spills, storm water runoff conveyed by storm drains and creeks is the primary source of elevated bacterial indicator densities to SMB beaches during wet weather. Because the bacterial indicators used as targets in the TMDL are not specific to human sewage, storm water runoff from undeveloped areas may also be a source of elevated bacterial indicator densities. For example, storm water runoff from natural areas may convey fecal matter from wildlife and birds or bacteria from soil. This is supported by the finding that, at the reference beach, the probability of exceedance of the single sample targets during wet weather is 0.22.</p>
Loading Capacity	<p>Studies show that bacterial degradation and dilution during transport from the watershed to the beach do not significantly affect bacterial indicator densities at SMB beaches. Therefore, the loading capacity is defined in terms of bacterial indicator densities, which is the most appropriate for addressing public health risk, and is equivalent to the numeric targets, listed above. As the numeric targets must be met in the wave wash and throughout the day, no degradation allowance is provided.</p>
Waste Load Allocations (for point sources)	<p>Waste load allocations are expressed as the number of sample days at a shoreline monitoring site that may exceed the single sample targets identified under "Numeric Target." Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.</p>

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Element	Key Findings and Regulatory Provisions
	<p>For each shoreline monitoring site and corresponding subwatershed, an allowable number of exceedance days is set for wet weather.</p> <p>The allowable number of exceedance days for a shoreline monitoring site for each time period is based on the lesser of two criteria (1) exceedance days in the designated reference system and (2) exceedance days based on historical bacteriological data at the monitoring site. This ensures that shoreline bacteriological water quality is at least as good as that of a largely undeveloped system and that there is no degradation of existing shoreline bacteriological water quality.</p> <p>All responsible jurisdictions and responsible agencies³ within a subwatershed are jointly responsible for complying with the allowable number of exceedance days for each associated shoreline monitoring site identified in Table 7-4.5 below.</p> <p>The three Publicly Owned Treatment Works (POTWs), the City of Los Angeles' Hyperion Wastewater Treatment Plant, Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant, and the Las Virgenes Municipal Water Districts' Tapia Wastewater Reclamation Facility, discharging to Santa Monica Bay are each given individual WLAs of zero (0) days of exceedance during wet weather.</p>

³ For the purposes of this TMDL, "responsible jurisdictions and responsible agencies" are defined as: (1) local agencies that are responsible for discharges from a publicly owned treatment works to the Santa Monica Bay watershed or directly to the Bay, (2) local agencies that are permittees or co-permittees on a municipal storm water permit, (3) local or state agencies that have jurisdiction over a beach adjacent to Santa Monica Bay, and (4) the California Department of Transportation pursuant to its storm water permit.

Attachment A to Resolution No. 2002-022

Element	Key Findings and Regulatory Provisions
Load Allocations (for nonpoint sources)	Because all storm water runoff to SMB beaches is regulated as a point source, load allocations of zero days of exceedance are set in this TMDL. If a nonpoint source is directly impacting shoreline bacteriological quality and causing an exceedance of the numeric target(s), the permittee(s) under the Municipal Storm Water NPDES Permits are not responsible through these permits. However, the jurisdiction or agency adjacent to the shoreline monitoring location may have further obligations as described under "Compliance Monitoring" below.
Implementation	<p>The regulatory mechanisms used to implement the TMDL will include primarily the Los Angeles County Municipal Storm Water NPDES Permit (MS4 Permit), the Caltrans Storm Water Permit, the three NPDES permits for the POTWs, the authority contained in sections 13267 and 13263 of the Water Code, and regulations to be adopted pursuant to section 13291 of the Water Code. Each NPDES permit assigned a waste load allocation shall be reopened or amended at reissuance, in accordance with applicable laws, to incorporate the applicable waste load allocation(s) as a permit requirement.</p> <p>The implementation schedule will be determined on the basis of the implementation plan(s), which must be submitted to the Regional Board by responsible jurisdictions and agencies within two years of the effective date of the TMDL (see Table 7-4.7). After considering the implementation plan(s), the Regional Board shall amend the TMDL at a public hearing and, in doing so, will adopt an individual implementation schedule for each jurisdictional group (described in paragraph 3 below) that is as short as possible taking into account the implementation approach being undertaken. Responsible jurisdictions and agencies must clearly demonstrate in the above-mentioned plan whether they intend to pursue an integrated water resources approach.⁴ If an integrated water resources approach is pursued, responsible jurisdictions and agencies may be allotted up to an 18-year implementation timeframe, based on a clear demonstration of the need for a longer schedule in the implementation plan, in recognition of the additional planning and time needed to achieve the multiple benefits of this approach. Otherwise, at most a 10-year implementation timeframe will be allotted, depending upon a clear demonstration of the time needed in the implementation plan.</p> <p>The subwatersheds associated with each beach monitoring location may</p>

⁴ An integrated water resources approach is one that takes a holistic view of regional water resources management by integrating planning for future wastewater, storm water, recycled water, and potable water needs and systems; focuses on beneficial re-use of storm water, including groundwater infiltration, at multiple points throughout a watershed; and addresses multiple pollutants for which Santa Monica Bay or its watershed are listed on the CWA section 303(d) List as impaired. Because an integrated water resources approach will address multiple pollutants, responsible jurisdictions can recognize cost-savings because capital expenses for the integrated approach will implement several TMDLs that address pollutants in storm water. An integrated water resources approach shall not only provide water quality benefits to the people of the Los Angeles Region, but it is also anticipated that an integrated approach will incorporate and enhance other public goals. These may include, but are not limited to, water supply, recycling and storage; environmental justice; parks, greenways and open space; and active and passive recreational and environmental education opportunities.

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Element	Key Findings and Regulatory Provisions
	<p>include multiple responsible jurisdictions and responsible agencies. Therefore, a "primary jurisdiction," defined as the jurisdiction comprising greater than fifty percent of the subwatershed land area, is identified for each subwatershed (see Table 7-4.6).⁵ Seven primary jurisdictions are identified within the Santa Monica Bay watershed, each with a group of associated subwatersheds and beach monitoring locations. These are identified as "jurisdictional groups" (see Table 7-4.6). The primary jurisdiction of each "jurisdictional group" shall be responsible for submitting the implementation plan described above, which will determine the implementation timeframe for the subwatershed. A jurisdictional group may change its primary jurisdiction by submitting a joint, written request, submitted by the current primary jurisdiction and the proposed primary jurisdiction, to the Executive Officer requesting a reassignment of primary responsibility. Two jurisdictional groups may also choose to change the assignment of monitoring locations between the two groups by submitting a joint, written request, submitted by the current primary jurisdiction and the proposed primary jurisdiction, to the Executive Officer requesting a reassignment of the monitoring location.</p> <p>If an integrated water resources approach is pursued, the jurisdictional group(s) must achieve a 10% cumulative percentage reduction from the total exceedance-day reduction required for the group of beach monitoring locations within 6 years, a 25% reduction within 10 years, and a 50% reduction within 15 years of the effective date of the TMDL. These interim milestones for the jurisdictional group(s) will be re-evaluated, considering planning, engineering and construction tasks, based on the written implementation plan submitted to the Regional Board two years after the effective date of the TMDL (see Table 7-4.7).</p> <p>If an integrated water resources approach is not pursued, the jurisdictional group(s) must achieve a 25% cumulative percentage reduction from the total exceedance-day reduction required for the group of beach monitoring locations within 6 years, and a 50% reduction within 8 years of the effective date of the TMDL (see Table 7-4.7).</p> <p>For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table 7-4.5.</p> <p>The final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach location no later than 18 years after the TMDL's effective date if an integrated water resources approach is pursued, or no later than 10 years after the TMDL's effective date if an integrated water resources approach is not pursued. In addition, the geometric mean targets must be achieved for each individual beach location no later than 18 years or 10 years after the effective date, respectively, depending on whether a integrated</p>

⁵ Primary jurisdictions are not defined for the Ballona Creek subwatershed or the Malibu Creek subwatershed, since separate bacteria TMDLs are being developed for these subwatersheds.

Attachment A to Resolution No. 2002-022

Element	Key Findings and Regulatory Provisions
	water resources approach is pursued or not.

Attachment A to Resolution No. 2002-022

Element	Key Findings and Regulatory Provisions
<i>Margin of Safety</i>	<p>The TMDL is set at levels that are exactly equivalent to the applicable water quality standards along with the proposed reference system/antidegradation implementation procedure.</p> <p>An implicit margin of safety is included in the supporting water quality model by assuming no dilution between the storm drain and the wave wash, the point of compliance. This is a conservative assumption since studies have shown that there is a high degree of variability in the amount of dilution between the storm drain and wave wash temporally, spatially and among indicators, ranging from 100% to 0%.</p>
<i>Seasonal Variations and Critical Conditions</i>	<p>Seasonal variations are addressed by developing separate waste load allocations for three time periods (wet weather, summer dry weather and winter dry weather) based on public health concerns and observed natural background levels of exceedance of bacterial indicators. (The two dry-weather periods are addressed in the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL.)</p> <p>The critical condition for this bacteria TMDL is wet weather generally, when historic shoreline monitoring data for the reference beach indicate that the single sample bacteria objectives are exceeded on 22% of the wet-weather days sampled. To more specifically identify a critical condition within wet weather in order to set the allowable exceedance days shown in Tables 7-4.5 and 7-4.6, the 90th percentile 'storm year'⁶ in terms of wet days is used as the reference year. Selecting the 90th percentile year avoids a situation where the reference beach is frequently out of compliance. It is expected that because responsible jurisdictions and agencies will be planning for this 'worst-case' scenario, there will be fewer exceedance days than the maximum allowed in drier years. Conversely, in the 10% of wetter years, it is expected that there may be more than the allowable number of exceedance days.</p>
<i>Compliance Monitoring</i>	<p>Responsible jurisdictions and agencies as defined in Footnote 2 shall conduct daily or systematic weekly sampling in the wave wash at all major drains⁷ and creeks or at existing monitoring stations at beaches without storm drains or freshwater outlets to determine compliance.⁸ At all locations, samples shall be taken at ankle depth and on an incoming wave. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close as possible to the wave wash, and no further away than 10 meters down current of the storm drain or outlet.⁹ At locations where there is a freshwater outlet, samples shall be taken when the freshwater outlet is flowing into the surf zone.</p> <p>If the number of exceedance days is greater than the allowable number of exceedance days for any jurisdictional group at the interim implementation milestones the responsible jurisdictions and agencies</p>

⁶ For purposes of this TMDL, a 'storm year' means November 1 to October 31. The 90th percentile storm year was 1993 with 75 wet days at the LAX meteorological station.

⁷ Major drains are those that are publicly owned and have measurable flow to the beach during dry weather.

⁸ The frequency of sampling (i.e., daily versus weekly) will be at the discretion of the implementing agencies. However, the number of sample days that may exceed the objectives will be scaled accordingly.

⁹ Safety considerations during wet weather may preclude taking a sample in the wave wash.

Attachment A to Resolution No. 2002-022

Element	Key Findings and Regulatory Provisions
	<p>shall be considered out-of-compliance with the TMDL. If the number of exceedance days exceeds the allowable number of exceedance days for a target beach at the final implementation deadline, the responsible jurisdictions and agencies within the contributing subwatershed shall be considered out-of-compliance with the TMDL. Responsible jurisdictions or agencies shall not be deemed out of compliance with the TMDL if the investigation described in the paragraph below demonstrates that bacterial sources originating within the jurisdiction of the responsible agency have not caused or contributed to the exceedance.</p> <p>If a single sample shows the discharge or contributing area to be out of compliance, the Regional Board may require, through permit requirements or the authority contained in Water Code section 13267, daily sampling in the wave wash or at the existing open shoreline monitoring location (if it is not already) until all single sample events meet bacteria water quality objectives. Furthermore, if a beach location is out-of-compliance as determined in the previous paragraph, the Regional Board shall require responsible agencies to initiate an investigation, which at a minimum shall include daily sampling in the wave wash or at the existing open shoreline monitoring location until all single sample events meet bacteria water quality objectives. If bacteriological water quality objectives are exceeded in any three weeks of a four-week period when weekly sampling is performed, or, for areas where testing is done more than once a week, 75% of testing days produce an exceedance of bacteria water quality objectives, the responsible agencies shall conduct a source investigation of the subwatershed(s) pursuant to protocols established under Water Code 13178. If a beach location without a freshwater outlet is out-of-compliance or if the outlet is diverted or being treated, the adjacent municipality, County agency(s), or State or federal agency(s) shall be responsible for conducting the investigation and shall submit its findings to the Regional Board to facilitate the Regional Board exercising further authority to regulate the source of the exceedance in conformance with the Porter-Cologne Water Quality Control Act.</p>

Note: The complete staff report for the TMDL is available for review upon request.

Attachment A to Resolution No. 2002-022

Table 7-4.5. Final Allowable Wet-Weather Exceedance Days by Beach Location

Beach Monitoring Location	Estimated no. of wet weather exceedance days in critical year (90 th percentile)*	Final allowable no. of wet weather exceedance days (daily sampling)*
DHS 010 - Leo Carrillo Beach, at 35000 PCH	17	17
DHS 009 - Nicholas Beach- 100 feet west of lifeguard tower	14	14
DHS 010a - Broad Beach	15	15
DHS 008 - Trancas Beach entrance, 50 yards east of Trancas Bridge	19	17
DHS 007 - Westward Beach, east of Zuma Creek	17	17
DHS 006 - Paradise Cove, adjacent to west side of Pier	23	17
DHS 005 - Latigo Canyon Creek entrance	33	17
DHS 005a - Corral State Beach	17	17
DHS 001a - Las Flores Beach	29	17
DHS 001 - Big Rock Beach, at 19900 PCH	30	17
DHS 003 - Malibu Point	18	17
DHS 003a - Surfrider Beach (second point)- weekly	45	17
S1 - Surfrider Beach (breach point)- daily	47	17
DHS 002 - Malibu Pier- 50 yards east	45	17
S2 - Topanga State Beach	26	17
DHS 101 - PCH and Sunset Bl.- 400 yards east	25	17
DHS 102 - 16801 Pacific Coast Highway, Bel Air Bay Club (chain fence)	28	17
S3 - Pulga Canyon storm drain- 50 yards east	23	17
DHS 103 - Will Rogers State Beach- Temescal Canyon (25 yds. so. of drain)	31	17
S4 - Santa Monica Canyon, Will Rogers State Beach	25	17
DHS 104a - Santa Monica Beach at San Vicente Bl.	34	17
DHS 104 - Santa Monica at Montana Av. (25 yds. so. of drain)	31	17
DHS 105 - Santa Monica at Arizona (in front of the drain)	31	17
S5 - Santa Monica Municipal Pier- 50 yards southeast	35	17
S6 - Santa Monica Beach at Pico/Kenter storm drain	42	17
DHS 106 - Santa Monica Beach at Strand St. (in front of the restrooms)	36	17
DHS 106a - Ashland Av. storm drain- 50 yards north	39	17
S7 - Ashland Av. storm drain- 50 yards south	22	17
DHS 107 - Venice City Beach at Brooks Av. (in front of the drain)	40	17

Attachment A to Resolution No. 2002-022

Beach Monitoring Location	Estimated no. of wet weather exceedance days in critical year (90 th percentile)*	Final allowable no. of wet weather exceedance days (daily sampling)*
S8 - Venice City Beach at Windward Av.- 50 yards north	13	13
DHS 108 - Venice Fishing Pier- 50 yards south	17	17
DHS 109 - Venice City Beach at Topsail St.	38	17
S11 - Dockweiler State Beach at Culver Bl.	23	17
DHS 110 - Dockweiler State Beach- south of D&W jetty	30	17
S12 - Imperial HWY storm drain- 50 yards north	17	17
DHS 111 - Hyperion Treatment Plant One Mile Outfall	18	17
DHS 112 - Dockweiler State Beach at Grand Av. (in front of the drain)	25	17
S10 - Ballona Creek entrance- 50 yards south	34	17
S13 - Manhattan State Beach at 40th Street	4	4
S14 - Manhattan Beach Pier- 50 yards south	5	5
DHS 114 - Hermosa City Beach at 26th St.	12	12
S15 - Hermosa Beach Pier- 50 yards south	8	8
DHS 115 - Herondo Street storm drain- (in front of the drain)	19	17
S16 - Redondo Municipal Pier- 50 yards south	14	14
DHS 116 - Redondo State Beach at Topaz St. - north of jetty	19	17
S17 - Redondo State Beach at Avenue I	6	6
S18 - Malaga Cove, Palos Verdes Estates-daily	3	3
LACSDM - Malaga Cove, Palos Verdes Estates-weekly	14	14
LACSDB - Palos Verdes (Bluff) Cove, Palos Verdes Estates	0	0
LACSD1 - Long Point, Rancho Palos Verdes	5	5
LACSD2 - Abalone Cove Shoreline Park	1	1
LACSD3 - Portuguese Bend Cove, Rancho Palos Verdes	2	2
LACSD5 - Royal Palms State Beach	6	6
LACSD6 - Wilder Annex, San Pedro	2	2
LACSD7 - Cabrillo Beach, oceanside	3	3

Notes: * The compliance targets are based on existing shoreline monitoring data and assume daily sampling. If systematic weekly sampling is conducted, the compliance targets will be scaled accordingly. These are the compliance targets until additional shoreline monitoring data are collected prior to revision of the TMDL. Once additional shoreline monitoring data are available, the following will be re-evaluated when the TMDL is revised 1) estimated number of wet-weather exceedance days in the critical year at all beach locations, including the reference system(s) and 2) final allowable wet-weather exceedance days for each beach location.

Attachment A to Resolution No. 2002-022

Table 7-4.6. Interim Compliance Targets by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)***	Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather****		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Caltrans Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	DHS 010	221	212	197
			Carbon Canyon	none			
			Corral Canyon	DHS 005a			
			Encinal Canyon	DHS 010a [#]			
			Escondido Canyon	none			
			Las Flores Canyon	DHS 001a			
			Latigo Canyon	DHS 005			
			Los Alisos Canyon	none			
			Pena Canyon	none			
			Piedra Gorda Canyon	DHS 001			
			Ramirez Canyon	DHS 006			
			Solstice Canyon	none			
			Topanga Canyon	S2			
			Trancas Canyon	DHS 008			
			Tuna Canyon	none			
			Zuma Canyon	DHS 007			
2	City of Los Angeles	Caltrans County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	none	342	324	294
			Dockweiler	S11, DHS 110, S12, DHS 111, DHS 112			
			Marina del Rey	DHS 107, S8 [#] , DHS 108, DHS 109			
			Pulga Canyon	S3, DHS 103			
			Santa Monica Canyon	S4			
			Santa Ynez Canyon	DHS 101, DHS 102			

Attachment A to Resolution No. 2002-022

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)***	Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather****		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
3	Santa Monica	Caltrans City of Los Angeles County of Los Angeles	Santa Monica	DHS 104a, DHS 104, DHS 105, S5, S6, DHS 106, DHS 106a, S7	257	237	203
4	Malibu	Caltrans County of Los Angeles	Nicholas Canyon	DHS 009*	14	14	14
5	Manhattan Beach	Caltrans El Segundo Hermosa Beach Redondo Beach	Hermosa	S13*, S14*, DHS 114*, S15#	29	29	29
6	Redondo Beach	Caltrans Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	DHS 115, S16*, DHS 116, S17#	58	57	56

Attachment A to Resolution No. 2002-022

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s) ^{***}	Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather ^{***}		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	Caltrans City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	S18 [#] , LACSDM [#] , LACSD8 [#] , LACSD1 [#] , LACSD2 [#] , LACSD3 [#] , LACSD5 [#] , LACSD6 [#] , LACSD7 [#]	36	36	36

Notes: *Interim milestones will be re-calculated during the revision of the TMDL based on shoreline monitoring data collected from the wave wash and a re-evaluation of the most appropriate reference system and reference year. Furthermore, if an integrated water resources approach is pursued, as demonstrated by the implementation plans to be submitted to the Regional Board by the primary jurisdictions within two years of the effective date of the TMDL, the interim milestones will be re-evaluated on the basis of the implementation plan, considering planning, engineering and construction tasks. **Interim milestones for the Malibu and Ballona shoreline monitoring locations will be identified in subsequent bacteria TMDLs to be developed for these two watersheds. ***Monitoring sites are those shoreline locations currently monitored by the City of Los Angeles, County Sanitation Districts of Los Angeles County, and the Los Angeles County Department of Health Services at the time of adoption of this TMDL by the Regional Board. This list does not preclude the establishment of additional monitoring stations. For those subwatersheds without an existing shoreline monitoring site, responsible jurisdictions and agencies must establish a shoreline monitoring site if there is measurable flow from a creek or publicly owned storm drain to the beach during dry weather. # For those beach monitoring locations subject to the anti-degradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table 7-4.5.

Attachment A to Resolution No. 2002-022

Table 7-4.7. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Significant Dates

Date	Action
120 days after the effective date of the TMDL	Pursuant to a request from the Regional Board, responsible jurisdictions and responsible agencies must submit coordinated shoreline monitoring plan(s) to be approved by the Executive Officer, including a list of new sites* and/or sites relocated to the wave wash at which time responsible jurisdictions and responsible agencies shall select between daily or systematic weekly shoreline sampling.
20 months after the effective date of the TMDL	Responsible jurisdictions and agencies shall provide a draft written report to the Regional Board outlining how each intends to cooperatively (through Jurisdictional Groups) achieve compliance with the TMDL. The report shall include implementation methods, an implementation schedule, and proposed milestones.
Two years after effective date of TMDL	Responsible jurisdictions and agencies shall provide a written report to the Regional Board outlining how each intends to cooperatively (through Jurisdictional Groups) achieve compliance with the TMDL. The report shall include implementation methods, an implementation schedule, and proposed milestones. Under no circumstances shall final compliance dates exceed 10 years for non-integrated approaches or 18 years for integrated water resources approaches. Regional Board staff shall bring to the Regional Board the aforementioned plans as soon as possible for consideration.
4 years after effective date of TMDL	<p>The Regional Board shall reconsider the TMDL to:</p> <ol style="list-style-type: none"> (1) refine allowable wet weather exceedance days based on additional data on bacterial indicator densities in the wave wash and an evaluation of site-specific variability in exceedance levels, (2) re-evaluate the reference system selected to set allowable exceedance levels, including a reconsideration of whether the allowable number of exceedance days should be adjusted annually dependent on the rainfall conditions and an evaluation of natural variability in exceedance levels in the reference system(s), (3) re-evaluate the reference year used in the calculation of allowable exceedance days, and (4) re-evaluate whether there is a need for further clarification or revision of the geometric mean implementation provision.

Attachment A to Resolution No. 2002-022

Date	Action
Significant Dates for Responsible Jurisdictions and Agencies <i>Not</i> Pursuing an Integrated Water Resources Approach	
6 years after effective date of the TMDL	Each defined jurisdictional group must achieve a 25% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.
8 years after effective date of the TMDL	Each defined jurisdictional group must achieve a 50% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.
10 years after effective date of the TMDL	Final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach as identified in Table 7-4.5. In addition, the geometric mean targets must be achieved for each individual beach location.
Significant Dates for Responsible Jurisdictions and Agencies Pursuing an Integrated Water Resources Approach to Implementation	
6 years after effective date of the TMDL	Each defined jurisdictional group must achieve a 10% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.
10 years after effective date of the TMDL	Each defined jurisdictional group must achieve a 25% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.
15 years after effective date of the TMDL	Each defined jurisdictional group must achieve a 50% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.
18 years after effective date of the TMDL	Final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach as identified in Table 7-4.5. In addition, the geometric mean targets must be achieved for each individual beach location.

Notes: *For those subwatersheds without an existing shoreline monitoring site, responsible jurisdictions and agencies must establish a shoreline monitoring site if there is measurable flow from a creek or publicly owned storm drain to the beach during dry weather.

Attachment B to Resolution No. 2002-022

Amendment to the Water Quality Control Plan – Los Angeles Region to Revise the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL

Adopted by the California Regional Water Quality Control Board, Los Angeles Region on December 12, 2002.

Amendments:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only)*

Table 7-4.3. Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Significant Dates

Date	Action
120 days after the effective date of the TMDL	Responsible jurisdictions and responsible agencies must submit coordinated shoreline monitoring plan(s), including a list of new sites or sites relocated to the wave wash at which time responsible jurisdictions and responsible agencies will select between daily and weekly shoreline sampling.
120 days after the effective date of the TMDL	<p>Responsible jurisdictions and responsible agencies must identify and provide documentation on 342 potential discharges to Santa Monica Bay beaches listed in Appendix C of the TMDL Staff Report dated January 11, 2002. Documentation must include a Report of Waste Discharge (ROWD) where necessary.</p> <p>Responsible jurisdictions and responsible agencies must identify and provide documentation on potential discharges to the Area of Special Biological Significance (ASBS) in northern Santa Monica Bay from Latigo Point to the County line.</p> <p>Cessation of the discharges into the ASBS shall be required in conformance with the California Ocean Plan.</p>
2-4 years after effective date of TMDL	Re-open TMDL to re-evaluate allowable winter dry weather exceedance days based on additional data on bacterial indicator densities in the wave wash, a re-evaluation of the reference system selected to set allowable exceedance levels, and a re-evaluation of the reference year used in the calculation of allowable exceedance days.
3 years after effective date of the TMDL	Achieve compliance with allowable exceedance days as set forth in Table 7-4.2a and rolling 30-day geometric mean targets during summer dry weather (April 1 to October 31).
6 years after effective date of the TMDL	Achieve compliance with allowable exceedance days as set forth in Table 7-4.2a and rolling 30-day geometric mean targets during winter dry weather (November 1 to March 31).

State of California
California Regional Water Quality Control Board, Los Angeles Region

RESOLUTION NO. 03-015
November 6, 2003

**Amendment to the *Water Quality Control Plan for the Los Angeles Region* to Update the
Chloride Objective for Reach 3 at Santa Paula in the Lower Santa Clara River**

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality standards which include beneficial use designations and criteria to protect beneficial uses for each water body found within its region.
2. The Regional Board carries out its CWA responsibilities through California's Porter-Cologne Water Quality Control Act and establishes water quality objectives designed to protect beneficial uses contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan).
3. The Basin Plan contains a chloride objective for Reach 3 of the Santa Clara River. The objective is based on protection of agricultural supply and groundwater recharge beneficial uses. The chloride objective for Reach 3 of the Santa Clara River is 80 mg/L and is based on recommendations made by the Regional Board staff and adopted in 1978.
4. The amendment proposed for adoption into the Basin Plan will update the current chloride objective for Reach 3 at Santa Paula in the lower Santa Clara River to recognize changes in water quality due to imported water supply over the last few decades and a recent assessment of a larger data set.
5. Section 303(d) of the CWA requires states to identify and to prepare a list of water bodies that do not meet water quality standards. The Santa Clara River was listed on California's 2002 section 303(d) list, due to impairment for chloride compounds.
6. The amendment will revise Chapter 3 "Water Quality Objectives" of the Basin Plan.
7. The proposed amendment is based on a more recent technical assessment of the most appropriate chloride indicators. Specifically, the existing objective was set based on chloride data collected between 1951 and 1975 which varied from 20 to 220 mg/L. While the mean annual values ranged from 60-80 mg/L, the data set contains more measurements collected at high flow and documents a strong inverse relationship between flow and chloride concentration. As a result, staff concludes that a higher objective is more representative of the average water quality in the lower Santa Clara

River. The existing data set documents that the proposed water quality objective of 100 mg/L was achieved 95% of the time both at present and in the past.

8. Further, as demonstrated in a staff presentation to the Regional Board in December 2000 regarding the chloride objective in the lower Santa Clara River, there is ample evidence that a chloride objective of 100 mg/L is sufficiently protective of the most sensitive beneficial use, agricultural supply.
9. On December 7, 2000, the Regional Board revised the water quality objective for chloride in the Santa Clara River at Santa Paula from 80 to 100 mg/L (Resolution 00-20). The Resolution was not forwarded to the State Board due to a problem with the adequacy of the public notice for Resolution 00-20. The Regional Board staff determined that the item needed to be reconsidered by the Regional Board.
10. The Regional Board adopted a chloride TMDL for the upper Santa Clara River on July 10, 2003 that will be heard by the State Water Quality Control Board (State Board) in 2004. The TMDL is designed to attain a water quality objective of 100 mg/L.
11. In June 2003, the U.S. EPA promulgated a chloride TMDL for the Lower Santa Clara River including Reach 3 at Santa Paula. The EPA staff report states that U.S. EPA is supportive of a chloride objective change to 100 mg/L and notes that the objective change is consistent with the Regional Board's proposed Chloride TMDL for the Upper Santa Clara River. The Regional Board subsequently adopted the Chloride TMDL for the Upper Santa Clara River on July 10, 2003.
12. The Regional Board, in reviewing the staff presentation and relevant materials in the administrative record, considered the factors required by Water Code section 13241. The past, present, and future beneficial uses of Reach 3 have been considered previously and, for purposes of a chloride objective, the most sensitive use continues to be agriculture supply. Environmental characteristics of Reach 3 are identified in the staff materials and reflect a river reach with variable chloride concentrations. Based on an analysis of the relevant data, the updated chloride objective in Reach 3 is consistent with those historical characteristics. Water quality conditions that could reasonably be achieved were considered in setting the existing chloride objective. Based on a review of the chloride data, the Regional Board concludes that a revised chloride objective of 100 mg/L is reasonable recognizing the increasing chloride loads and efforts to control and abate sources of chloride loading. The Regional Board has considered the costs of implementing the amendment, and finds these costs to be a reasonable burden relative to the environmental benefits. The amendment relaxes the existing objective to a level consistent with historical data. As a result, the cost of implementing the revised objective is potentially less than the costs of implementing the existing objective. For similar reasons, the objective change should not adversely affect the need for developing housing within the region or for recycled water.

13. The proposed amendment results in no potential for adverse effect, either individually or cumulatively, on wildlife.
14. The regulatory action proposed meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
15. The amendment is consistent with the State Antidegradation Policy (State Water Resources Control Board (SWRCB) Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
16. The basin planning process has been certified as 'functionally equivalent' to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code, Section 21000 et seq.).
17. Regional Board staff has prepared an summary dated September 9, 2003, describing the proposed amendment, and sent the summary to all known interested persons to allow a 45-day public comment period in advance of the public hearing.
18. The Regional Board held a public hearing on November 6, 2003, for the purpose of receiving testimony on the proposed Basin Plan amendment. Notice of the public hearing was sent to all interested persons and published in accordance with California Water Code, section 13244.
19. The Basin Plan amendment must be submitted for review and approval by the SWRCB, Office of Administrative Law (OAL), and U.S. EPA. Once approved by the SWRCB, the amendment is submitted to OAL and U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. A Notice of Decision will be filed.

THEREFORE, be it resolved that

1. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to the Water Quality Control Plan for the Los Angeles Region as set forth in the attachment.
2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the SWRCB in accordance with the requirements of section 13245 of the California Water Code.

3. The Regional Board requests that the SWRCB approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the U.S. EPA.
4. If during its approval process the SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
5. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 6, 2003.



Dennis A. Dickerson
Executive Officer

ATTACHMENT

In Chapter 3 "Water Quality Objectives" of the Basin Plan, replace line 6 on Table 3-8 Water Quality Objectives for Selected Constituents in Inland Surface Waters under "chloride" on p. 3-12 with the following:

	Chloride (mg/L)
Between A street, Fillmore and Freeman Diversion " Dam " near Saticoy	80 100

State of California
California Regional Water Quality Control Board, Los Angeles Region

RESOLUTION NO. 04-023
March 4, 2004

Amendment to the Water Quality Control Plan for the Los Angeles Region to Amend the Total Maximum Daily Load for Trash in the Ballona Creek and Wetland.

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

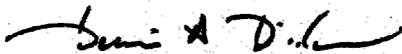
1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality objectives which are sufficient to protect beneficial uses for each water body found within its region.
2. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the USEPA to complete Total Maximum Daily Loads (TMDLs) for all impaired waters within 13 years. A schedule was established in the consent decree for the completion of the first 29 TMDLs within 7 years. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
3. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)). The regulations in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.
4. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). This Water Quality Control Plan for the Los Angeles Region (Basin Plan), and applicable statewide plans, serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
5. Ballona Creek is located in Los Angeles County, California. Ballona Creek flows slightly over 10 miles from the City of Los Angeles, through Culver City, reaching the ocean at Playa del Rey. Adjacent to the downstream channel of Ballona Creek are the Marina del Rey Harbor, Ballona Lagoon, Venice Canals, Del Rey Lagoon, and Ballona Wetlands.

6. On September 19, 2001, the Regional Board adopted the Ballona Creek and Wetland Trash TMDL. The TMDL subsequently was approved by the State Water Resources Control Board on February 19, 2002 and by the Office of Administrative Law on July 18, 2002. The United States Environmental Protection Agency approved the Ballona Creek and Wetland Trash TMDL on August 1, 2002.
7. The City of Los Angeles and the County of Los Angeles both filed petitions and complaints in Los Angeles Superior Court challenging the current Ballona Creek Trash TMDL. Subsequent negotiations led to a settlement agreement, which became effective on September 23, 2003. The Basin Plan amendment incorporates the negotiated language into the Ballona Creek and Wetland TMDL.
8. On March 4, 2004, prior to the Board's action on this resolution, public hearings were conducted on the Ballona Creek and Wetland Trash TMDL. Notice of the hearing for the *Ballona Creek and Wetland Trash TMDL* was published in accordance with the requirements of Water Code section 13244. This notice was published in the Los Angeles Times.
9. In amending the Basin Plan, the Regional Board considered the factors set forth in sections 13240 and 13242 of the Water Code.
10. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
11. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents (Public Resources Code, section 21000 et seq.) and as such, the required environmental documentation and CEQA environmental checklist have been prepared.
12. The proposed amendment results in no potential for adverse effect (de minimis finding), either individually or cumulatively, on wildlife.
13. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
14. The Basin Plan amendment incorporating minor changes to the *Ballona Creek and Wetland Trash TMDL* must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the USEPA. The Basin Plan amendment will become effective upon approval by OAL and USEPA. A Notice of Decision will be filed.
15. If during its approval process the SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.

THEREFORE, be it resolved that pursuant to sections 13240 and 13242 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapters 3 and 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate revisions to the Ballona Creek and Wetland Trash TMDL.
2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
3. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the USEPA.
4. If during its approval process the State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
5. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 4, 2004.



Dennis A. Dickerson
Executive Officer

Amendments
to the
Water Quality Control Plan – Los Angeles Region
for the
Ballona Creek Trash TMDL

Amendments:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries Ballona Creek Trash TMDL*

Add a second paragraph documenting the dates when the amendment to the Ballona Creek Trash TMDL was adopted and approved.

"This TMDL was amended by:

The Regional Water Quality Control Board on March 4, 2004.

The State Water Resources Control Board on [Insert Date]

The Office of Administrative Law on [Insert Date]

The U.S. Environmental Protection Agency on [Insert Date]"

Table 7-3.1 Ballona Creek Trash TMDL Elements

Add to Table 7-3.1, Row 6, "Implementation":

"Compliance with the final waste load allocation may be achieved through a full capture system. A full capture system is any device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the subdrainage area. Rational equation is used to compute the peak flow rate: $Q = C \times I \times A$, where Q = design flow rate (cubic feet per second, cfs); C = runoff coefficient (dimensionless); I = design rainfall intensity (inches per hour, as determined per the rainfall isohyetal map in Figure A), and A = subdrainage area (acres). The isohyetal map may be updated annually by the Los Angeles County hydrologist to reflect additional rain data gathered during the previous year. Annual updates published by the Los Angeles County Department of Public Works are prospectively incorporated by reference into this TMDL and accompanying Basin Plan amendment."

Add Figure A, referenced in Table 7-3.1.

Table 7-3.2 Ballona Creek Trash TMDL: Implementation Schedule

Add footnote to Table 7-3.2:

"Notwithstanding the zero trash target and the default waste load allocations shown in Table 7-3.2, a Permittee will be deemed in compliance with the Trash TMDL in areas served by a Full Capture System within the Ballona Creek and Estuary Watershed."

Change existing footnote 1 to footnote 2 and modify language to clarify that the Regional Board will conduct the review and will reconsider the final Waste Load Allocations:

² The Regional Board will review and reconsider the final Waste Load Allocations once a reduction of 50% has been achieved and sustained.

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries Ballona Creek Trash TMDL*

This TMDL was adopted by:

The Regional Water Quality Control Board on September 19, 2001.
The State Water Resources Control Board on February 19, 2002.
The Office of Administrative Law on July 18, 2002.
The U.S. Environmental Protection Agency on August 1, 2002.

This TMDL was amended by:

The Regional Water Quality Control Board on March 4, 2004.
The State Water Resources Control Board on [Insert Date]
The Office of Administrative Law on [Insert Date]
The U.S. Environmental Protection Agency on [Insert Date]"

The following table presents the key elements of this TMDL.

Table 7-3.1 Ballona Creek: Trash TMDL Elements

Element	Derivation of Numbers
Problem Statement	Trash in Ballona Creek is causing impairment of beneficial uses. The following designated beneficial uses are impacted by trash: water contact recreation (REC1); non-contact water recreation (REC2); warm freshwater habitat (WARM); wildlife habitat (WILD); estuarine habitat (EST); marine habitat (MAR); rare and threatened or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction and early development of fish (SPWN); commercial and sport fishing (COMM); shellfish harvesting (SHELL); wetland habitat (WET); and cold freshwater habitat (COLD).
Numeric Target <i>(interpretation of the narrative water quality objective, used to calculate the load allocations)</i>	Zero trash in the river.
Source Analysis	Stormwater discharge is the major source of trash in the river.

Loading Capacity	Zero.
Waste Load, Allocations	Phased reduction for a period of 10 years, from existing baseline load to zero.
Implementation	<p>This TMDL will be implemented through stormwater permits and via the authority vested in the Executive Officer by section 13267 of the Porter-Cologne Water Quality Control Act: Water Code section 13000 et seq. Compliance with the final waste load allocation may be achieved through a full capture system. A full capture system is any device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the subdrainage area. Rational equation is used to compute the peak flow rate: $Q = C \times I \times A$, where Q = design flow rate (cubic feet per second, cfs); C = runoff coefficient (dimensionless); I = design rainfall intensity (inches per hour, as determined per the rainfall isohyetal map in Figure A), and A = subdrainage area (acres). The isohyetal map may be updated annually by the Los Angeles County hydrologist to reflect additional rain data gathered during the previous year. Annual updates published by the Los Angeles County Department of Public Works are prospectively incorporated by reference into this TMDL and accompanying Basin Plan amendment.</p>
Margin of Safety	"Zero discharge" is a conservative standard which contains an implicit margin of safety.
Seasonal Variations and Critical Conditions	Discharge of trash from the storm drain occurs primarily during or shortly after a rain event of greater than 0.25 inches.

*The complete administrative record for the TMDL is available for review upon request.

Figure A

1-Year 30-Min Rainfall Intensity (Inches/Hour)



Table 7-3.2 Ballona Creek Trash TMDL: Implementation Schedule.¹
(Default waste load allocations expressed as cubic feet of uncompressed trash and % reduction.)

Year	Baseline Monitoring/ Implementation	Waste Load Allocation	Compliance Point
1 10/1/01-- 9/30/02	Baseline Monitoring	No allocation specified. Trash will be reduced by levels collected during the baseline monitoring program.	Achieved through timely compliance with baseline monitoring program.
2 10/1/02-- 9/30/03	Baseline Monitoring	No allocation specified. Trash will be reduced by levels collected during the baseline monitoring program.	Achieved through timely compliance with baseline monitoring program.
3 10/1/03-- 9/30/04	Baseline Monitoring (optional)/ Implementation: Year 1	90% (9,985 for the Municipal permittees, 1,472 for Caltrans)	No compliance point (target of 90%)
4 10/1/04-- 9/30/05	Baseline Monitoring (optional)/ Implementation: Year 2	80% (8,875 for the Municipal permittees, 1,308 for Caltrans)	No compliance point (target of 80%)
5 10/1/05-- 9/30/06	Implementation: Year 3	70% (7,776 for the Municipal permittees; 1,146 for Caltrans)	Compliance is 80% of the baseline load calculated as a rolling 3-year annual average (8,875 for the Municipal permittees; 1,308 for Caltrans).
6 10/1/06-- 9/30/07	Implementation: Year 4	60% (6,656 for the Municipal permittees; 981 for Caltrans)	70% of the baseline load the baseline load calculated as a rolling 3-year annual average (7,776 for the Municipal permittees; 1,146 for Caltrans).
7 10/1/07-- 9/30/08	Implementation: Year 5 ²	50% (5,547 for the Municipal permittees; 818 for Caltrans)	60% of the baseline load calculated as a rolling 3-year annual average (6,656 for the Municipal permittees; 981 for Caltrans)
8 10/1/08-- 9/30/09	Implementation: Year 6	40% (4,438 for the Municipal permittees; 654 for Caltrans)	50% of the baseline load calculated as a rolling 3-year annual average (5,547 for the Municipal permittees; 818 for Caltrans).
9 10/1/09-- 9/30/10	Implementation: Year 7	30% (3,328 for the Municipal permittees; 491 for Caltrans)	40% of the baseline load calculated as a rolling 3-year annual average (4,438 for the Municipal permittees; 654 for Caltrans).
10 10/1/10-- 9/30/11	Implementation: Year 8	20% (2,218 for the Municipal permittees; 327 for Caltrans).	30% of the baseline load calculated as a rolling 3-year annual average (3,328 for the Municipal permittees; 491 for Caltrans).
11 10/1/11-- 9/30/12	Implementation: Year 9	10% (1,110 for the Municipal permittees; 164 for Caltrans).	20% of the baseline load calculated as a rolling 3-year annual average (2,220 for the Municipal permittees; 327 for Caltrans).
12 10/1/12-- 9/30/13	Implementation: Year 10	0 or 0 % of the baseline load.	10% of the baseline load calculated as a rolling 3-year annual average (1,110 for the Municipal permittees; 164 for Caltrans).
13 10/1/13-- 9/30/14	Implementation: Year 11	0 or 0 % of the baseline load.	3.3 % of the baseline load calculated as a rolling 3-year annual average (366 for the Municipal permittees, 54 for Caltrans).
14 10/1/14-- 9/30/15	Implementation: Year 12	0 or 0 % of the baseline.	0 or 0 % of the baseline load.

¹ "Notwithstanding the zero trash target and the default waste load allocations shown in Table 7-3.2, a Permittee will be deemed in compliance with the Trash TMDL in areas served by a Full Capture System within the Ballona Creek and Estuary Watershed."

² The Regional Board will review and reconsider the final Waste Load Allocations once a reduction of 50% has been achieved and sustained.

Table 7-3.3. Ballona Creek Trash TMDL: Significant Dates.

30 days after receipt of the Executive Officer's request as authorized by Section 13267 of the Water Code annual average.	Submit baseline monitoring plan(s).
120 days after receipt of the Executive Officer's request as authorized by Section 13267 of the Water Code.	List of facilities that are outside of the permittee's jurisdiction but drain to a portion of the permittee's storm drain system, which discharges to Ballona Creek.
Within the first 2 years after approval of this basin plan amendment; to be extended to 4 years at the option of the permittees	Collection of baseline data.
72 hours after each rain event	Clean out of and measurement of trash retained.
Every 3 months during dry weather	Clean out of and measurement of trash retained.